

## **DEPARTMENT OF DEFENSE APPROPRIATIONS FOR FISCAL YEAR 2009**

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**WEDNESDAY, MARCH 12, 2008**

U.S. SENATE,  
SUBCOMMITTEE OF THE COMMITTEE ON APPROPRIATIONS,  
*Washington, DC.*

The subcommittee met at 10:31 a.m., in room SD-192, Dirksen Senate Office Building, Hon. Daniel K. Inouye (chairman) presiding.

Present: Senators Inouye, Dorgan, Murray, Stevens, Domenici, Bond, and Shelby.

DEPARTMENT OF DEFENSE

DEPARTMENT OF THE AIR FORCE

OFFICE OF THE SECRETARY

**STATEMENT OF HON. MICHAEL W. WYNNE, SECRETARY OF THE AIR  
FORCE**

OPENING STATEMENT OF SENATOR DANIEL K. INOUE

Senator INOUE. Today we welcome the Honorable Michael Wynne, Secretary of the Air Force, and General T. Michael Moseley, the Air Force Chief of Staff. Gentlemen, thank you for being here today as the subcommittee reviews the Air Force's budget request for fiscal year 2009.

The Air Force's fiscal year 2009 base budget requests \$117 billion, an increase of \$8.6 billion over last year's enacted bill.

The subcommittee recognized the priorities of the Air Force of fighting and winning the long war on terror, taking good care of the airmen and their families, and preparing for tomorrow's challenges. We also recognize the challenges associated with recapitalizing or trying to modernize the existing fleet and maintaining readiness at the same time. With the average age of the fleet being 24 years old and the aircraft recapitalization rate approaching 50 years, it is imperative to find the correct balance among these competing priorities in order for the Air Force to posture itself for the future.

Another challenge that I am hoping to learn more about in today's testimony is the personnel drawdown of our airmen. The Air Force is projecting that there will be an end strength of 316,000 by fiscal year 2009, which is a reduction of 40,000 airmen since 2005. We are all aware that the environment in which the decision was made to draw down Air Force personnel has changed significantly,

and according to the unfunded requirements submitted by the Air Force, you need an additional \$385 million in fiscal year 2009 in support of the Air Force's 86 combat wings, also referred to as the required force.

The unfunded requirements list submitted by the Air Force contains 150 items and totals to a staggering \$18 billion. And this is in an environment where funding for the Department of Defense is at historically high, unprecedented rates, if intended or not. The message that I take away from such a document is that something is wrong. The services should not have to depend on the Congress to fund basic needs such as personnel requirements to sustain the force. To many in Congress, an \$18 billion unfunded requirements list says our budget process is broken.

Another matter that is likely to be a topic of discussion this morning is the recent decision of the new tanker being awarded to Northrop-Grumman Corporation. We hope that Air Force officials involved in the decisionmaking process can provide more details on why they selected the Northrop-Grumman-EADS team over Boeing. As soon as the factors affecting the decision are known, people will be better informed to decide whether the award was appropriate.

Finally, as the subcommittee examines the fiscal year 2009 request, we must remember that the budget before us is based on recommendations made 6 months ago and it will be several months before a bill will be approved and sent to the White House. Between now and then, there are likely to be changes recommended for your requests in order to best serve our national defense. This subcommittee works hard to propose adjustments that makes sense. I believe it is the duty of Congress and the military services to work as partners in identifying and executing adjustments made during the appropriations process. And so I look forward to working with each of you to continue that spirit of cooperation which is a tradition that has served our Nation well.

Gentlemen, we sincerely appreciate your service to our Nation and the dedication and sacrifices that are made daily by the men and women in the United States Air Force. We could not be more grateful for what you do.

Your full statements will be included in the record, and now it is my pleasure and honor to turn to my co-chairman, Senator Stevens for his opening remarks.

#### STATEMENT OF SENATOR TED STEVENS

Senator STEVENS. Thank you very much, Mr. Chairman.

I'm glad to see you here, Mr. Secretary and General.

This is a difficult time because I think we all know there is not enough money available right now to meet all the demands for every service, and we have some tough choices to make. I look forward to your testimony.

I will say right up front I am currently a little worried about how we can handle, even get involved in this tanker dispute because of the briefing we had yesterday where we were told that so much of it is tied up in an area that is considered to be classified and particularly because of the fact that there is a protest that has been filed against the selection.

Having said that, I think that we are permitted to talk about one problem that I see which is paramount and that is, the production that takes place in 21 countries is considered the production in the United States. And that has caused concern in my home State—I do not know about the rest of the members. We are getting overwhelming mail on both sides of this issue about the question of the propriety of the foreign involvement in a critical program such as the tanker program.

I look forward to the chance to discuss this with you, but I do hope that we can understand—I do understand the parameters that we must operate in because of the situation of the protests and because of the classification of the basic information we received yesterday. But we still have to have some way to satisfy our constituents as to whether this decision was right or wrong. So I look forward to your testimony.

Mr. Chairman, Senator Cochran could not be here today, but asked that his statement be inserted into the record.

[The statement follows:]

#### PREPARED STATEMENT OF SENATOR THAD COCHRAN

Mr. Chairman, I am pleased to join you in welcoming Secretary Wynne and General Moseley this morning.

The Air Force is playing an important role in the global war on terrorism both on the ground and in the air. Its aircraft and forces have been guarding the skies over the United States since 2001, not to mention the support provided in Iraq, Afghanistan, and many other areas around the world.

In Mississippi, we are proud to host bases at which airmen are trained for a wide range of jobs from pilots to electronics technicians. This training provides the foundation for many of the brave men and women of the Air Force who contribute to our nation's air and space superiority. They operate or support the fighters, bombers, gunships, tankers, unmanned aircraft and space assets that are so vital to the success of our forces worldwide.

Mr. Secretary and General Moseley, we look forward to hearing your testimony to help us determine how best to address the needs of the Air Force, so you can accomplish the important missions assigned to you in support of our national security. Thank you, and the service members you represent, for your service.

Senator INOUE. Thank you.

Senator Murray.

#### STATEMENT OF SENATOR PATTY MURRAY

Senator MURRAY. Mr. Chairman, I also look forward to the testimony today. I share the concern that Senator Stevens just voiced. I do know that there is proprietary information in the protest, but I will have some questions regarding both the impact on national security, questions that we as policymakers really have to look at when we are coming to this, and the issue of a company that has illegal subsidies that does have an impact on their price, as well as our decisions as policymakers on the fact that we have a contract going to a company that we do as a country have a case against because of those illegal subsidies. So I do think it is important for us to explore those and to understand as policymakers what decisions we have to make in terms of foreign-owned companies and its impact on our military and military procurement. I will be raising those questions as well.

And I thank you for the hearing today.

Senator INOUE. Senator Dorgan.

## STATEMENT OF SENATOR BYRON L. DORGAN

Senator DORGAN. Mr. Chairman, thank you very much. Let me welcome General Moseley and Secretary Wynne. I have been here through a lot of Secretaries and Chiefs, and I think both of you do a really outstanding job. I appreciate your service a lot.

There are now, I believe, 26,000 airmen and women serving from the Air Force in Iraq and Afghanistan and the region.

The chairman raised the point about funding. I think he is right. I think our funding system is broken. We cannot keep deciding we are going to fund a substantial portion of our military based on emergency supplementals, and we have got lots of problems on these funding issues and we are going to need to confront them.

I do not know that I can stay for the entire hearing because I have to be on the floor on the budget, but I am very interested in when the bomber study that our subcommittee required of the Air Force will be completed and where you think this is headed, General Moseley.

I too am interested in the tanker issue. I expect this issue is going to get a lot of attention both in this subcommittee and outside of the subcommittee.

I am also very interested in what you are learning these days and what you are experiencing with respect to retention because retention will determine what kind of an Air Force we have, and I am very interested in what happens to the young men and women who join the Air Force and how able we are to retain their services in the Air Force.

But having said all of that, let me thank both of you. I think you both do a terrific job and I am pleased that you are where you are.

Senator INOUE. Thank you.

Senator Domenici.

Senator DOMENICI. Thank you very much, Mr. Chairman. I will wait for my observations and questions until my turn. Thank you.

Senator INOUE. Thank you.

Senator Shelby.

Senator SHELBY. Mr. Chairman, I have an opening statement. I would ask that it be made part of the record.

Senator INOUE. Without objection.

[The statement follows:]

## PREPARED STATEMENT OF SENATOR RICHARD C. SHELBY

Thank you, Mr. Chairman.

Secretary Wynne, General Moseley, thank you for testifying today on the Air Force's fiscal year 2009 budget priorities. I also appreciate you being here to answer the inevitable questions that will come up regarding your recent tanker contract announcement. While there has been a lot of rhetoric about the Air Force's decision, I believe the controversy surrounding the tanker award is not based on the facts.

From the very beginning, it appeared clear that the Air Force's mission was to select the best tanker for the warfighter at the best price for the taxpayer. In a lengthy, full, fair and open competition, it was determined that the KC-30 was superior to the KC-767. The KC-30 has more fuel offload, carries more passengers, and transports more cargo, thereby giving the Air Force more capability, availability, flexibility and dependability. The KC-30 outperforms Boeing's KC-767 not only by industry standards, but most importantly, by the Air Force's standards. It is clearly the best tanker to meet the Air Force's needs.

However, the recent debate has not surrounded these issues. Instead, it has focused on inaccurate job claims and which U.S.-based company is "more American."

Mr. Chairman, according to the Department of Commerce's job-forecasting tool, the industry standard, Northrop Grumman will employ approximately the same number of American workers on the tanker contract that Boeing would have employed. The prime contractor of the team that won, Northrop Grumman, is headquartered in Los Angeles. It is no less an American company than is Boeing.

It is also important to note, neither of these issues were factors used by the Air Force when making their selection. If the U.S. Air Force and Members of Congress wanted the tanker to be a job creation program for Boeing, they would have scrapped a competition and sole sourced the contract in the first place. Instead, the intent was to provide our men and women in uniform with the best air refueling aircraft in the world, at the best value for the American taxpayer.

Finally, it is important to note that according to the Congressional Research Service, Congress has never intervened to overturn the outcome of a competitive source selection. For Congress to do as some Members suggest would be counter to long-standing law, require the taxpayer to pay for an aircraft that provides less value for the money, and would undermine the very integrity of our military acquisition process. Congress must remain as objective as possible and let the merits of this decision speak.

Thank you, Mr. Chairman.

Senator SHELBY. I too will be very interested in what you have to say about the award of the tanker contract because I think some of us had a briefing on it yesterday. We know there is a regular order here, that Boeing is going to protest it to the Government Accountability Office. That is my understanding. And we have a due process. But we would like to hear what you and the Secretary say about it because we have more than a passing interest in it.

Thank you.

Senator INOUE. Thank you very much.

Mr. Secretary.

Mr. WYNNE. Senator Inouye, Senator Stevens, members of this subcommittee, thank you for the opportunity to testify on behalf of America's Air Force. Thank you as well for your support to our improved readiness via retirement and recapitalization. We are working hard to see it through.

Today we also urge you to pass the pending supplemental, as it will help.

Across the Total Force of Active, Guard, Reserve, and civilians, we are America's strategic shield in air, in space, and in cyberspace. We are contributing to today's fight with increasing ordnance drops and we stand watch at the missile fields. We stand ready in the nuclear field, and we are an effective air superiority and strike force to both deter and dissuade any opponent who may consider our forces to be stretched in the global war on terror (GWOT). We are gratified to hear that role reaffirmed by the Chairman of the Joint Chiefs in a deliberate message to those who might seek to dissuade or deter us from our own options in the future.

#### RECAPITALIZATION AND MODERNIZATION

This is why we seek to move forward, and not backward, into fifth generation fighters, into new expeditionary tankers, and into new long-range strike assets. We recently awarded the new KC-45A air refueling tanker. We believe we accurately followed the laws and arrived at a decision selecting the better of two very qualified competitors to a published criterion, a major step in the Air Force's critical recapitalization and modernization effort.

It is why we seek to modernize space assets as the executive agent for space and not see further fragmentation of the management of this now vulnerable area. It is why we have established the Provisional Cyberspace Command and we see this as a warfighting domain in which we need to dominate to remain a net centric force for the future.

Clearly, beyond the global war on terror, we must not lose America's asymmetric advantage in strategic forces. Your Air Force has been in the fight for 17 years and yet has over the same 17 years seen underfunded modernization. We thank you for the initiatives to restore fleet management to the United States Air Force, a responsibility we do not take lightly.

When General Moseley and I came to our posts, we set about a strategy to restructure our Air Force, to truly develop a lean and efficient Air Force in order to husband the resources for investment. We do worry about the industrial base and the need to look after open lines.

I am pleased to report to you that the Department and the Air Force had indicated a desire to not close the F-22 line and to develop the long-range strike asset. It is to these that we would like to apply the saved resources over the near term while the F-35 proves itself through rigorous tests and is effectively capped on production. We ask that you agree with an approach for the F-22 aircraft while we work to restore our readiness with younger aircraft. The F-35 and the F-22 are complementary aircraft. The F-22 is bigger, faster, planned to fly higher, and can carry more air-to-air weapons internally.

Also, with 20 penetrating bombers in our current fleet, it is time to develop an alternative there as well. We have talked about being underfunded, but here we have worked hard to offer a balanced budget, prioritized to best defend America, and we will continue to do that over the future years defense planning.

The Air Force Research Laboratory is well engaged in technology development, expanding the opportunity for energy alternatives while reducing our demand in our fleet and in our bases, also in unmanned flight and propulsion, in material science, as well as in human effectiveness. In regard to space, at Kirtland Air Force Base, New Mexico, a branch of the Air Force Research Laboratory is creating inherently defensive space assets. In cyberspace, we are focused on career development and recruiting at the Air Force Institute of Technology and also warfighting schools that we believe are key. Combatant commanders and agencies partner with us in this increasingly contested domain.

I have worked in space for almost two decades and have worked in commercial and classified space as a supplier and a customer. We need consolidated leadership to maintain our current strategic advantage. Congress asked for a relook at responses to the Space Commission, and we should really consider what is in their report. The Air Force is undergoing a back to basics, as well as a back to blue, complementary efforts to restore a steady demand and a knowledge base. I recommend we keep the executive agency where it is.

I have engaged airmen in both theaters of operation and they have asked about the continuation of our presence and the continu-

ation of the ground force tasking referred to as in lieu of tasking. My answer is they performed so well that, frankly, our Army colleagues do not want to give them up. And they do perform well, many winning bronze and silver stars. Your Air Force is currently protecting the air sovereignty of these fledgling nations, and until their air forces can do that, I would not be surprised to see our Air Force remain. As a result, we are reconsidering force cuts, although we are currently continuing to give top priority in our budget request to recapitalization.

#### PREPARED STATEMENT

I again thank you for the privilege of leading the best air force in the world. Every day our airmen earn the respect of our friends and enemies. We do worry for their quality of life, as we seek efficiency and as we implement joint basing, but we never worry about the sense of mission that they bring to the task. I will not have the privilege to represent them in this setting for the force posture again, and I hope I have reflected their pride in service as I have felt myself.

I am prepared to take your questions.

Senator INOUE. Thank you very much.

[The statement follows:]

PREPARED STATEMENT OF HON. MICHAEL W. WYNNE AND GENERAL T. MICHAEL MOSELEY

#### THE NATION'S GUARDIANS

The United States Air Force provides the Nation with a powerful deterrent force in times of peace, and it sets the conditions for Joint and Coalition victory in times of war. For over 17 years, since Operation DESERT SHIELD, the United States Air Force has been engaged in continuous combat operations. Our Airmen have maintained constant watch, deployed continuously, engaged America's adversaries directly, responded to human crises around the world, and provided the Global Vigilance, Global Reach, and Global Power to secure our Nation.

*Global Vigilance.*—The ability to gain and maintain awareness—to keep an unblinking eye on any entity—anywhere in the world; to provide warning and to determine intent, opportunity, capability, or vulnerability; then to fuse this information with data received from other Services or agencies and use and share relevant information with the Joint Force Commander.

*Global Reach.*—The ability to project military capability responsively—with unrivaled velocity and precision—to any point on or above the earth, and provide mobility to rapidly supply, position, or reposition Joint forces.

*Global Power.*—The ability to hold at risk or strike any target anywhere in the world, assert national sovereignty, safeguard Joint freedom of action, and achieve swift, decisive, precise effects.

Global Vigilance, Global Reach, and Global Power constitute America's edge—America's asymmetric advantage that shapes the global security environment. Global Vigilance, Global Reach, and Global Power are vital to our National Security Strategy, as conveyed through the decision superiority they allow, the military options they provide, and the influence they command. However, in a world of increasing uncertainty, volatility, and accelerating technology, America's edge will become a fleeting advantage if we fail to maintain and hone it.

The United States Air Force executes its missions globally. Its warfighting domains cover the entire planet, offering a unique perspective. Every day, America's Airmen demonstrate a non-negotiable commitment to offer and deliver sovereign options for the United States in, through and from air, space, and cyberspace.

Our Air Force strategic imperatives articulate why these sovereign options are necessary to maintain and strengthen our national security and global stability. The Air Force is redefining air, space, and cyber power through cross-domain dominance—our effort to integrate all of our capabilities to exploit the natural synergies across these warfighting domains.

This Statement articulates the major elements of our Air Force Posture—our strategy for fulfilling our role in defending the Nation and its interests; our contributions to winning the Global War on Terrorism; our most critical efforts and concerns; and our top priority programs. We will continue to pursue specific programs and initiatives to safeguard and strengthen America’s military advantages and to address major concerns and risks.

Three overarching Service priorities serve as the organizing principles for all of our efforts: Winning Today’s Fight; Taking Care of Our People; and Preparing for Tomorrow’s Challenges. The Air Force’s top acquisition priorities specifically begin to address our critical recapitalization and modernization needs—the new Tanker (KC-X); the new Combat Search and Rescue Helicopter (CSAR-X); modern space systems to provide capabilities vital to our Joint warfighters; the F-35A Lightning II; and a new Bomber we intend to field by 2018.

We will continue our efforts to modernize and protect America’s vital air, space, and cyberspace capabilities. We strongly recommend extending the existing C-130J production line. We are also concerned with preserving America’s aerospace industrial base. Additionally, we seek relief from restrictions on the retirement of aging, worn-out aircraft which are increasingly unsafe, unreliable, and obsolete. The Air Force is highly engaged in national efforts to assure sustainable energy, and we will continue to push the performance envelope on fuel efficiency and renewable energy technologies. We are committed to the Joint Basing initiative and want to work through the transfer of total obligation authority and real property control without impacting command authorities, reducing installation service support, or negatively affecting quality of life. Finally, we will continue our practice of recruiting and retaining the world’s highest quality Airmen. We will build upon our successes in achieving Total Force Integration of our Regular, Guard, Reserve, and Civilian Airmen.

America looks to its Airmen to provide dominance that spans the air, space, and cyberspace warfighting domains. They need your support today to defend the Homeland and to prepare for tomorrow’s threats and challenges. Full funding and support for America’s Airmen will ensure America’s continued freedom of action; reassure our allies; strengthen our partnerships; reinforce our sovereign Homeland defenses; dissuade and deter adversaries; and set conditions for Joint and Coalition success across the entire spectrum of conflict and crisis.

We guard the Nation—providing the Global Vigilance, Global Reach, and Global Power that underwrite the security and sovereignty of our Nation.

#### STRATEGIC IMPERATIVE

The mission of the United States Air Force is to deliver sovereign options for the defense of the United States of America and its global interests—to fly and fight in Air, Space, and Cyberspace.

Today the United States stands at a strategic crossroads. This junction is characterized by a global economy accompanied by a diffusion of technology, new and increasingly complex economic and international relationships, competition for resources and influence, and the changing conduct of warfare. From the early days of the 20th Century, the United States has played a leading role in preserving and protecting international stability, particularly as the number of democratic nations grew. This leadership led in large part to the current world order and provided the backdrop against which countries like Japan, India, and China initiated their unprecedented economic growth. We cannot abdicate our position of political and military leadership without grave consequences.

#### *Challenges*

Today’s confluence of global trends already foreshadows significant challenges to our organization, systems, concepts, and doctrine. We are at an historic turning point demanding an equally comprehensive redefinition of American air power. The future strategic environment will be shaped by the interaction of globalization, economic disparities, and competition for resources; diffusion of technology and information networks whose very nature allows unprecedented ability to harm and, potentially, paralyze advanced nations; and systemic upheavals impacting state and non-state actors and, thereby, international institutions and the world order. The following are salient features of this increasingly complex, dynamic, lethal, and uncertain environment:

- Violent extremism and ethnic strife—a global, generational, ideological struggle;
- Proliferation of weapons of mass destruction and empowering technologies;
- Predatory and unpredictable regional actors;
- Increasing lethality and risk of intrusion by terrorist and criminal organizations;



- Systemic instability in key regions (political, economic, social, ideological);
- Unprecedented velocity of technological change and military adaptation;
- Availability of advanced weapons in a burgeoning global marketplace;
- Exponential growth in volume, exchange, and access to information;
- Surging globalization, interconnectivity, and competition for scarce resources;
- and
- Dislocating climate, environmental, and demographic trends.

The consequences of not being adequately prepared for a conflict should a military peer arise would be severe and potentially catastrophic. We must maintain our focus on deterring potential peer adversaries from using military threats to narrow our diplomatic options, or from embarking on militarily risky courses of action. The rapid development and proliferation of high-technology weapons, combined with innovative operational concepts, is likely to make these global and regional engagements particularly challenging, since power balances will be dynamic and the risks of miscalculation and misperception high. Therefore, maintaining deterrence will require a sophisticated, competitive strategy that assures we maintain required military capabilities for today and make sustainable, affordable investments for tomorrow.

Even if we continue to successfully dissuade and deter major competitors, their advanced equipment is proliferating worldwide. We are bound to confront these weapons systems wherever America engages to promote and defend its interests. We must also vigilantly monitor adversary breakthroughs and maintain leading edge research and capabilities in fields such as cybernetics, nanotechnology, biotechnology, electromagnetism, robotics, energy conversion technology, and advanced propulsion. We cannot assume the next military revolution will originate in the West. Indeed, the hub of innovation in science and engineering education has shifted eastward. Therefore, we must anticipate innovative combinations of traditional and new concepts, doctrines, weapons systems, and disruptive technologies.

Given this spectrum of threats, the United States must field an Air Force capable of assuring our allies, dissuading and deterring potential adversaries, and, if necessary, defeating those who choose to become our enemies.

#### *The Role of the United States Military*

It is always better to deter hostile intent or win without having to fight. Today, the United States military does this by shaping the international environment with the potent tools of assurance, dissuasion, and deterrence. The principal role of the United States military is to defend our Nation and our national interests. Rooted in overwhelming capabilities and plainly linked to the national will, two powerful tools we exercise in this role are our assurance to allies that they need not bow to violent threats and our deterrence of potential adversaries. Our armed Services accomplish this role by providing a solid foundation of military strength to complement the tools of peaceful diplomacy. None of these tools alone can sustain our position of international political and economic influence. However, we must be prepared to provide our leaders with critical elements of United States military power to use in proper combination and in an integrated manner to address potential threats to our Nation and our interests.

#### *Sovereign Options*

In response to current and emerging threats, the Air Force has implemented a strategy based on providing policy makers with sovereign options for our defense, covering the spectrum of choices that air, space, and cyberspace capabilities offer for solving problems. We use this strategy for sovereign options to guide how we organize, train, and equip our forces. In peacetime, these options include such expedients as: supporting the containment of aggressive states or usurping elements of their sovereignty as a means short of war to compel positive behavior; signaling opponents of our commitment by moving forces into contested regions; and providing humanitarian aid—to both our allies and potentially hostile populations—to assure them of friendly United States intentions. In war, Air Force capabilities provide decision makers with a range of options, from supporting Joint and Coalition actions in conjunction with allied land and sea forces to direct strikes against enemy centers of gravity to accomplish strategic and tactical objectives. These options provide the country with credible and scalable counters to the full range of potential enemy actions and support our goals of assurance, dissuasion, and deterrence. These sovereign options are enabled by the asymmetric advantage the United States possesses in air and space technology and the way our preeminence in air, space, and cyberspace increases the power of all United States and Coalition forces.

Through aggressive development of technology and operational concepts, the United States enjoys leadership in space, and in recent decades has achieved the

ability to gain air supremacy against enemy air forces and air defense systems. The history of warfare, however, shows such advantages to be fleeting and fragile. Air and space preeminence is the key to the ability to accurately strike targets within enemy states or enable friendly ground or maritime forces to rapidly dominate their respective domains. While United States air and space preeminence has transformed the way the United States fights, allowing Joint and Coalition forces unprecedented freedom of action in all domains, the Nation cannot rest on its laurels. Future preeminence is not guaranteed; instead, it must be planned, paid for, developed, and fielded.

More than the ability to win wars, sovereign options increase the Nation's strategic flexibility in determining when, how, and where to engage an enemy. War is not a matter of convenience. When war is thrust upon us, we must have the strategic depth to shape the conditions of conflict. From 1991 to 2003, the use of no-fly zones allowed the United States to contain the aggressive actions of Saddam Hussein. When his aggressive acts drew us into open conflict, the determined use of air power as part of a Joint force crushed Iraq's conventional armies. A similar fate met the forces of Al Qaeda in Afghanistan. When the Taliban were removed from power in 2001 by a combination of air power working with Special Forces and indigenous Northern Alliance troops, we disrupted Osama bin Laden's plan to operate his global terrorist network from the relative sanctuary of the Afghan frontier. In the insurgencies that followed these operations, air, space and cyberspace power continued to prevent insurgents from massing into guerrilla armies, thus diminishing their power and providing friendly forces time and territory to establish stability.

The Air Force's ability to be simultaneously dominant in air, space, and cyberspace, has formed the foundation from which we provide sovereign options to policy makers. Our ability to operate across these domains and defeat our adversaries in each allows the Air Force the ability to multiply the power of Joint and Coalition forces or to act alone to achieve national objectives. Our Air Force combines capabilities in the domains of air, space, and cyberspace to deliver Global Vigilance, Global Reach, and Global Power to the Joint force.

#### *Cross-Domain Dominance*

No future war will be won without air, space, and cyberspace superiority. Accordingly, the Air Force must be better postured to contend with both today's and tomorrow's challenges. To promote and defend America's interests through Global Vigilance, Global Reach, and Global Power, the Air Force must attain cross-domain dominance.

Airmen appreciate the interdependence of the air, space, and cyberspace domains—actions in one domain can lead to decisive effects in any and all domains. Cross-domain dominance is the ability to maintain freedom of action in and through the air, space, and cyberspace despite adversary actions. It permits rapid and simultaneous application of lethal and non-lethal capabilities in these three domains to attain strategic, operational, and tactical objectives in all warfighting domains: land, sea, air, space, and cyberspace.

Through cross-domain dominance, the Air Force contributes to Joint freedom of maneuver in all warfighting domains. This, in turn, allows the Joint Force Commander to achieve desired outcomes across the full range of military operations, from humanitarian relief to preventing war via dissuasion and deterrence to inflicting strategic paralysis on implacable opponents. Without the Air Force's ability to present this spectrum of capabilities to the Joint Team in peace, crisis, and war, United States national security would be at risk.

#### *Implementing the Strategy*

The Air Force currently provides Joint and Coalition forces with an air bridge to the rest of the world and dominance on the battlefield. This hard-won capability to dominate air and space will only persist in coming decades if carefully nurtured.

The technology race continues. Today, opponents are studying our operations in Iraq and Afghanistan and are rapidly developing counters to aging United States air and space superiority technology. These adaptive competitors are translating lessons from recent conflicts into new warfighting concepts, capabilities, and doctrines specifically designed to counter United States strengths and exploit vulnerabilities. They are advancing in all domains. For example:

- “Generation 4-plus” fighter aircraft that challenge America's existing “4th Generation” inventory—and, thus, air superiority—with overwhelming numbers and advanced weaponry; sophisticated integration of electronic attack and advanced avionics; emerging low-observable technologies; and progressive, realistic, networked training.

- Increasingly lethal integrated air defense systems (IADS) that threaten both our Airmen and aircraft, and could negate weapons used to suppress or destroy these systems.
- Proliferation of surface-to-surface missiles with growing range, precision, mobility, and maneuverability that are capable of delivering both conventional and non-conventional warheads.
- Proliferation of unmanned aerial systems (UAS) capable of conducting low observable, persistent, intrusive missions in both lethal and non-lethal modes.
- Resurgence of offensive counterspace capabilities, including anti-satellite (ASAT) weapons, jamming, and blinding.
- Increasing ability of even marginal actors to surveil the disposition of United States and allied assets through widely-accessible, commercially-available means.

In the coming years our advantage will significantly diminish if we do not keep pace by fielding new 5th Generation fighters, modern bombers, and modern satellites in sufficient numbers to counter the development of advanced anti-air and anti-space technologies and the inevitable export of those capabilities to potentially hostile states and non-state actors. We must provide our Airmen with the most exceptional tools for battle in order to sustain a durable and credible deterrent against our adversaries.

Equally worrisome is the rapidly shrinking aerospace industrial base. Historically, America's strength and ability to capitalize on advances in air and space technologies hinged largely on its vibrant and diverse aerospace industry. This advantage has deteriorated over the last decade.

Beyond advantages in technology and operational concepts, America's commitments abroad require an expeditionary Air Force that can engage forward in peacetime and fight forward in wartime. While long-range bombers and missiles are the ultimate guarantor of United States security and power, expeditionary presence reflects United States power and is the indispensable source of local and regional assurance, dissuasion, deterrence, and, ultimately, sovereign options. Engaging forward in times of peace and fighting forward in times of war are hallmarks of United States national security strategy. Therefore, the Air Force must have sufficient resources and capability to continue to maintain a sustainable, rotational base. We must retain sufficient manpower and force structure to project influence.

The mechanism to accomplish this is the Air and Space Expeditionary Force (AEF) that provides Joint Force Commanders with a trained and ready air, space, and cyberspace force to execute their plans. United States influence flows from permanent and expeditionary basing and serves to assure allies of United States commitment while deterring our adversaries from threatening United States national interests. The Air Force works with Combatant Commanders and partner air forces to secure basing and counter potential anti-access strategies. We continue to develop new ways of projecting power without exposing vulnerabilities, and we design systems that facilitate reach-back, thus maximizing forward capability while minimizing forward footprint.

The Air Force can provide Global Vigilance, Global Reach and Global Power only so long as it possesses robust capabilities in such areas as air dominance; global strike; space superiority; intelligence, surveillance, and reconnaissance (ISR); missile defense; special operations; air mobility, and cyberspace superiority. Today, electronic communications constitute and connect all Joint and Coalition capabilities. In an information age, this network allows us to find our opponents, process the information, route it to where it is needed, and guide our munitions to their targets. Cyberspace vastly increases our capabilities but also presents a potential vulnerability our adversaries could exploit. Our enemies also increasingly use and depend on cyberspace systems. Safeguarding our own capabilities while engaging and disrupting the use and purpose of our opponents' capabilities is thus increasingly critical to modern warfare.

If the Air Force is to fulfill its crucial role, we must develop and maintain technological leads in the areas of air-superiority, anti-access penetration, and long-range reconnaissance and strike capabilities to hold at risk targets around the world. We must also field sufficient strike and full-spectrum mobility assets to assure dominance for the Joint Team. We must continue treating space as an operational domain by creating architectures and systems that allow us to provide the appropriate situational awareness and communications capability, giving strategic and tactical advantage to leadership at all levels. We must design and develop a force structure to operate in cyberspace to our benefit while holding adversaries at risk. While doing so, we will continue our series of cross-Service initiatives to enhance interoperability and avoid unnecessary duplication of acquisition, manning and operations.

## WIN TODAY'S FIGHT

We remain committed, first and foremost, to fighting and winning the long Global War on Terror (GWOT), sustaining our current operations, and providing strategic defense of our Nation. We also continue to adapt our ability to deter adversary activities, detect enemy locations, and defeat them through direct or indirect actions when required—anywhere and at any time.

America's Airmen are key to Joint success and have proven their capabilities applicable and adaptable across the entire spectrum of conflict. They are the most battle-tested force in our history. Today's GWOT missions are only the latest in a succession of over 17 years of continuous combat and expeditionary operations, beginning with our initial Operation DESERT SHIELD deployments in August 1990; continuing with years of persistent conflict in Southwest Asia, Somalia, the Balkans, and Haiti; and through ongoing operations in Iraq, Afghanistan, and around the world. The past 17 years have clearly demonstrated success at any point along the spectrum of conflict requires air, space, and cyberspace superiority.

*Maintain Global Vigilance, Global Reach, and Global Power for America*

We are the Nation's premier multi-dimensional maneuver force, with the agility, reach, speed, stealth, payload, firepower, precision, and persistence to achieve global effects. Dominance of air, space, and cyberspace provides the essential bedrock for effective Joint operations.

Today's Air Force provides the Joint Force Commander a range of capabilities that set conditions for success. Our Airmen currently fly an average of over 300 sorties daily as part of Operations IRAQI FREEDOM and ENDURING FREEDOM (OIF/OEF). These sorties include Intertheater and Intratheater Airlift; Aeromedical Evacuation (AE); Aerial Refueling; Command and Control (C2); Intelligence, Surveillance, and Reconnaissance (ISR); Close Air Support (CAS); and pre-planned Strike.

Our Airmen operate on a global scale every day; Air Force engagement in the Central Command (CENTCOM) area of responsibility (AOR) is only the "tip of the iceberg." The complete picture of Air Force engagement includes Airmen deployed to contingencies outside of the Continental United States (OCONUS), forward deployed in Europe and the Pacific, and employed from their home stations as they execute global missions.

Furthermore, the Air Force is the only Service flying Operation NOBLE EAGLE (ONE) missions, which have been continuous since September 2001. America's Airmen fly fighters, tankers, and Airborne Warning and Control aircraft during daily Air Sovereignty Alert operations. America's Airmen also command and control these aircraft, maintaining vigilance and protection of America's air corridors and maritime approaches in defense of our Homeland.

Since 2001 the Active Duty Air Force has reduced its end-strength by almost 6 percent, but our deployments have increased over 30 percent—primarily in support of GWOT. Approximately 26,000 Airmen are deployed to over 100 locations around the world to fight in the GWOT at any given moment—fighting our enemies in their own backyard so they cannot come to ours. In addition, approximately 208,000 Airmen—178,000 Regular Air Force Airmen plus 30,000 Guard and Reserve Airmen—fulfill additional Combatant Commander (CCDR) requirements, missions and tasks 24 hours a day, 7 days a week. In other words, approximately 41 percent of our Total Force Airmen—including 54 percent of the Regular force—are globally contributing to winning today's fight and are directly fulfilling CCDR requirements every day.

Whether controlling satellites, flying unmanned aerial vehicles (UAVs), standing strategic missile alert, or analyzing intelligence information, Airmen directly engage America's adversaries and affect events worldwide every day.

*Intelligence, Surveillance, and Reconnaissance*

Intelligence, surveillance, and reconnaissance (ISR) is the foundation of Global Vigilance, Global Reach, and Global Power. It cuts across all domains and affects almost every mission area. Today, ISR efforts make up the majority of the operations required to achieve our security objectives. These operations range from finding the enemy, to deconstructing its network and intentions, to making it possible to deliver weapons or other effects on target, to subsequently assessing the results of those efforts.

Intelligence, Surveillance, and Reconnaissance is the linchpin of our Effects-Based Approach to Operations (EBAO). It is impossible to accurately predict the effect of operations on an enemy system without good intelligence; nor can one assess the outcome of delivered effects without detailed surveillance and reconnaissance. Intelligence requirements for an effects-based approach to operations and effects-based

assessment (EBA) are much more demanding than the old attrition-based model. The increased intelligence detail necessary for EBAO/EBA makes focused reconnaissance and persistent surveillance operations ever-more crucial.

The Air Force has demonstrated its commitment to the importance of ISR by establishing a 3-star Deputy Chief of Staff for ISR, the Air Force ISR Agency, and formed a global organization for the processing of ISR data from a variety of sources. These initiatives demonstrate the Air Force has shifted the way it manages ISR capabilities from a Cold-War platform perspective to a 21st Century holistic capability-based approach.

#### *Strike*

In addition to our ONE missions over the Homeland, America's Airmen fly daily OIF and OEF missions, keeping a watchful eye on America's adversaries and providing lethal combat capabilities that take the fight to our enemies. In 2007, America's Airmen conducted nearly 1,600 strikes in Iraq and Afghanistan. In Iraq alone, Air Force strikes increased by 171 percent over the previous year, while in Afghanistan strikes increased by 22 percent. These increases clearly demonstrate the applicability, flexibility, and prevalence of Air Force combat options in ongoing OIF and OEF counterinsurgency operations.

Engaging directly is only a small portion of what the Air Force provides. To meet current and future challenges, we must maintain a credible deterrent that convinces potential adversaries of our unwavering commitment to defend our Nation, its allies and friends. One prominent example is our ICBM force—the United States nuclear arsenal continues to serve as the ultimate backstop of our security, dissuading opponents and reassuring allies through extended deterrence. Besides continuing the recapitalization of our fighter force, we must also modernize our bomber and ICBM forces.

#### *Space*

Space superiority, like air superiority, has become a fundamental predicate to Joint warfighting. Indeed, America's space superiority has completely transformed the way America fights. America's Airmen currently operate 67 satellites and provide command and control infrastructure for over 140 satellites in total, providing the Nation persistent global communications; weather coverage; strategic early warning; global Positioning, Navigation and Timing (PNT); signals and ISR capabilities—all vital to Joint success.

Space superiority relies on assured access to space, and Air Force launch programs continue to provide this capability. In 2007, we extended our record to 56 straight launch successes, including deployment of two new Global Positioning System (GPS) satellites. Also in 2007, we successfully launched the first operational Evolved Expendable Launch Vehicle (EELV) heavy lift rocket. This rocket deployed the final satellite in the Defense Support Program (DSP) constellation of ballistic missile warning satellites.

#### *Airlift*

Airlift is an Air Force core competency, and our Airmen prove it everyday. Air Force airlifters—both Intertheater and Intratheater—have become absolutely indispensable to Joint Forces in Iraq and Afghanistan as well as to crisis response planners and responders in the wake of natural disasters both at home and abroad. The Air Force gives America an air bridge—a strategic asset providing operational reach—making possible the deployment and employment of Joint combat power and humanitarian relief.

Airmen provide the Nation's ground forces with the tactical, operational, strategic, and logistical reach to rapidly deploy, deliver, supply, re-supply, egress, and evacuate via air anywhere in the world. In Iraq, Air Force airlift delivers approximately 3,500 equivalent truckloads of cargo in an average month, taking more than 8,600 people off dangerous roads and providing the Army and Marine Corps the flexibility to re-assign those vehicles and associated support troops to alternate missions and safer routes.

#### *Aeromedical Evacuation*

Air Force Aeromedical Evacuation (AE) is a Total Force, combat-proven system contributing a unique, vital capability to the Joint fight. AE and enroute care are built on teamwork, synergy, and Joint execution, providing Soldiers, Sailors, Marines, Coast Guardsmen, and Airmen the highest casualty survival rates in the history of warfare. Casualties treated in our deployed and Joint theater hospitals have an incredible 97 percent survival rate.

Since late 2001, we have transported more than 48,500 patients from the CENTCOM AOR to higher levels of care. We continue to refine this remarkable capability and the enroute care system built upon our expeditionary medical system.

#### *Joint Force Land Component Tasks*

Of the approximately 26,000 Airmen currently deployed in the CENTCOM AOR, over 6,200 are performing tasks and missions normally assigned to the Land Component—also known as “In Lieu Of” (ILO) tasks. Airmen currently fill other Services’ billets in some of their stressed skill areas and are taking on tasks outside Air Force core competencies. Since 2004 we have deployed approximately 24,000 Airmen in support of such ILO tasks, and we expect a steady increase in that total.

In addition to the 6,200 Airmen currently deployed supporting ILO taskings, over 1,000 Airmen are “in the pipeline” for ILO Task training at any given time. Within the Joint Team, Airmen provide the Joint Force Commander distinctive skills. While complementary, these skills are not interchangeable amongst the team, thus Airmen require ground-centric combat training to accomplish ILO taskings. This training increases personnel tempo (PERSTEMPO) for our Airmen, but, more importantly, ILO tasks and training consumes critical training time, resources, manpower, and in some cases reduces overall proficiency in Air Force core mission areas. In many cases, Air Force career fields already at critical manning levels are further affected by unit deployment rates of as high as 40 percent, primarily filling ILO taskings. Such high deployment rates from units cannot be absorbed without putting at risk the critical missions and capabilities the Air Force provides our Nation. This situation creates additional risk to the critical missions the Air Force performs and capabilities the Air Force provides our Nation.

#### *Strengthen Global Partnerships*

Fighting and winning the GWOT requires commitment, capability, and cooperation from our allies and partners around the world. We depend on them to secure their territory, support regional stability, provide base access and overflight rights, and contribute a host of air, space, and cyber power capabilities as interoperable Coalition partners.

So America’s strategic partnerships are more important than ever. Our Air Force will strengthen and broaden international relationships, capitalizing on the global community of like-minded Airmen while attending to interoperability between allies and partners. Building these relationships not only expands, extends, and strengthens Global Vigilance, Global Reach, and Global Power, but also leverages the Air Force’s value as an engine of progress and, thus, as a potent instrument of America’s diplomacy in an increasingly interconnected world.

The Air Force strives to develop synergistic, interoperable air forces utilizing a capabilities-based approach. Foreign Military Sales and Direct Commercial Sales allow our partners to operate common systems with the Air Force while providing a vehicle to expand relationships with our international partners. Some recent examples of mutually beneficial agreements include Australian, Canadian, and British selection of C-17 Globemaster III airlifters; international participation in the F-35A Lightning II Joint Strike Fighter (JSF) program and the Advanced Extremely High Frequency (AEHF) satellite communications program; British Royal Air Force procurement of MQ-9 Reaper UAVs; and Australian participation in the Wideband Global SATCOM (WGS) system. Future opportunities for partnerships—with platforms such as UAVs, C-17s, C-130Js, and the new C-27—can open doors for greater interoperability, personnel exchanges, common doctrine, and training.

In addition to integrating international partners into the most robust combat training scenarios, we maintain our commitment to the pursuit of partnerships for greater global cooperation, security, and stability. We recently held the 3rd Global Air Chiefs Conference in Washington, DC, which gave over 90 international Air Chiefs the opportunity to learn, understand, and share concerns and issues with fellow Airmen from around the world. We are also making strides to improve language expertise and cultural understanding through deliberate development of Airmen in the International Affairs Specialist program, expanding Military Personnel Exchange Program, and cultivating skilled and knowledgeable attache.

The Air Force’s approach to operations, interoperability and training exemplify our global, international, and expeditionary perspective—built on the shared traditions of airmanship that transcend geographic boundaries.

#### TAKE CARE OF OUR PEOPLE

Any organizational renaissance begins with people. We must prepare our Airmen for a future fraught with challenges, fostering their intellectual curiosity and ability to learn, anticipate, and adapt. Because our expeditionary Airmen must be prepared

to deploy and ready to fight, we are revitalizing the world's most advanced training system and expanding their educational opportunities. While we enrich our Airmen's culture, leadership, training, education, and heritage, we will also continue to care for their families and provide for their future.

Our Airmen are our most precious resource. They must be well-trained and ready for expeditionary warfighting responsibilities. Fiscal constraints dictate that we continue to carefully shape the force. Additionally, within the context of rising costs, we remain committed to providing the highest possible quality of life standards and charting out a career full of education and training for each Airman. We will continue our emphasis on recruiting and retaining the world's highest quality Airmen. Additional Air Force high priority efforts serve to reinforce a warrior ethos throughout our Service, provide proactive force health protection, and encourage Air Reserve Component (ARC) volunteerism.

Spanning six decades of Air Force history, particularly over the past 17 years, our Airmen have proven themselves as the global first responders in times of crisis—taking action anytime, anywhere. The foundations for this well-deserved reputation are the quality and frequency of the training and education we provide and our commitment to the highest possible safety and quality of life standards.

#### *Shape the Force*

Ultimately, we must produce a Total Force that is sized and shaped to consistently meet current and future requirements—balanced against the compelling need to maintain high quality of life standards—to meet the global challenges of today and tomorrow.

During the 1990s, while engaged in continuous combat, the Air Force suffered a seven year “procurement holiday.” Today, fiscal constraints have tightened as energy and health care costs have continued to increase dramatically.

In late 2005, the Air Force reduced its end strength by 40,000 Active Duty, Guard, Reserve and civilian Full-time Equivalents (FTEs) in order to self-finance the vital re-capitalization and modernization of our aircraft, space, and missile inventories. End strength reduction by 40,000 FTEs over a 3-year period was our only viable alternative to preserve the required investment capital.

Our Force Shaping efforts have placed us on a path to meet our end strength targets. However, personnel changes of this magnitude come with a degree of uncertainty and difficulty for our Airmen and their families. We are making every effort to use voluntary measures to shape the force with the right skills mix, increase manning in stressed career fields, leverage new technologies, and refine our internal processes to reduce workload and reduce or eliminate unnecessary work through Air Force Smart Operations 21 (AFSO21).

We have reduced our Air Force end strength using a methodology that has preserved a strong expeditionary capability. Our AEF construct provides an enterprise view of Service risk that synchronizes our resources and assets to support our global requirements. However, reducing Air Force end strength further, coupled with ILO taskings for the foreseeable future, carries considerable risks of “burning out” our Airmen in several critical expeditionary career fields as well as limiting our future national options to meet global mission requirements in an increasingly volatile world.

#### *Ensure Highest Quality of Life Standards*

Our “People” priority demands we ensure the quality of life we offer our Airmen meets the highest possible standards. Because the nature of our Air Force mission demands a highly educated, trained, and experienced force, we recognize the direct linkages between quality of life issues and their impact on our recruiting, retention, and, ultimately, our mission capability.

#### *Housing and Military Construction*

Air Force investments in housing underscore our emphasis on developing and caring for Airmen. Through Military Construction (MILCON) and housing privatization, we are providing higher quality homes faster than ever. With the fiscal year 2009 funding, we will revitalize more than 2,100 homes through improvement or replacement. We are on track to meet our fiscal year 2009 goal of eliminating inadequate housing at overseas locations.

MILCON is an essential enabler of Air Force missions; however, due to fiscal constraints, we must reduce funding and accept greater risk in facilities and infrastructure in order to continue our efforts to recapitalize and modernize our aging aircraft and equipment. However, our new construction projects are state of the art, incorporating energy efficient features and sustainable designs. We have prioritized the most critical requirements to support the Air Force and DOD requirements. Our

MILCON plan supports these priorities by focusing on new mission beddowns, training, and depot transformation, as well as dormitory and child care center upgrades.

#### *Joint Basing*

The Air Force has a long and successful history of working toward common goals in a Joint environment without compromising Air Force principles and the well-being of our people. Joint Basing initiatives are no exception. To guarantee success, each Joint Base should be required to provide a suitable setting to all of its assigned personnel, their families, and other customers within the local communities our bases support.

To accomplish this, we advocate establishment of a common Joint Base quality of life standard. Our Airmen, Soldiers, Sailors, Marines, DOD Civilians and their families will benefit from efficient, consistent installation support services. Such standards will ensure the Air Force and our sister Services continue to provide all personnel with the level of installation support services they deserve. As we work with the Office of the Secretary of Defense and our sister Services, we will ensure all Joint Basing initiatives contribute to the DOD's ability to perform its mission. We will also safeguard against potential negative impacts to the Joint and Air Force approach to mission performance.

To do this, we will have to work through the transfer of TOA and real property without eroding the local installation commander's prerogatives relative to satisfying mission and training requirements, optimizing installation resources, tailoring installation services to local needs, and prioritizing MILCON funding. We will also have to work through the transfer without reducing the combat capability our bases generate, installation service support standards, or the quality of life for Service members, their families, and other customers of these services.

We look forward to establishing a BRAC-envisioned executive agency agreement involving local leaders and the local unit commander. Such an agency, combined with elimination of duplicate offices and administration of centrally agreed standards, would improve efficiency while safeguarding mission requirements and quality of life for families and Service members. We believe the natural, direct feedback and tension between a service provider and a paying customer is the best model to drive efficiency and cost savings.

The Air Force remains committed to ensuring that all bases, Joint or otherwise, maintain their capability to perform their missions and meet our quality of life standards. We want Joint Bases to be so efficient and effective that an assignment to a Joint base would be a highlight for every Service member.

#### *Recruit, Train, and Retain Highest Quality Airmen*

The Air Force is the "Retention Service"—we recruit, train, develop, and retain the best America has to offer. Our emphasis on retention stems from the high technical and operational expertise required of our personnel. The high morale, cohesiveness, and capability of the Air Force are due to our efforts to retain a highly experienced, educated, and skilled force.

The Air Force has never lowered its recruiting standards. We continue to recruit and choose the best America has to offer from our diverse population. Our recruiting and retention figures remain impressive, clearly indicating our success to date and the effectiveness of the Air Force's holistic approach to quality of life, recruiting, and retention. This success reaffirms our commitment to long-term family support efforts, education, and training.

While we recruit Airmen, we retain families. We believe our Airmen should never have to choose between serving their country and providing for their families. Quality of life and family support are critical elements of our overall effort to retain high quality Airmen. As part of our efforts to maintain high quality of life standards, we are concerned with the hardships facing our Air Force families resulting from the frequent moves our Airmen and other Service members make throughout their careers. We applaud ongoing Congressional and interstate efforts addressing such issues as transfer of educational credits for military members and dependents, professional certifications for military spouses, and economic support for military families coping with spousal income disadvantages.

Additionally, Air Force training initiatives continue to evolve, improving our ability to develop and retain the world's best air, space, and cyberspace warriors. We are concentrating our efforts to reprioritize Air Force professional education opportunities to reflect a balance between winning today's fight and preparing for tomorrow's challenges.

Tuition assistance continues to be a strong incentive that helps ensure we meet our recruiting and retention goals. We believe voluntary education, facilitated with tuition assistance, not only aids in recruiting and retention, but further reinforces



national strength and richness by producing more effective professional Airmen and more productive American citizens for the Nation, both during their enlistment and their eventual return to civilian life.

Within the last 2 years we have taken several initiatives to “intellectually and professionally recapitalize” our Airmen. We are developing leaders with the management acumen, cultural sophistication, international expertise, and language skills to successfully lead a diverse, globally engaged force. Air Education and Training Command and Air University are leading our efforts to reinvigorate the world’s most advanced educational system for Airmen by expanding our full-spectrum educational opportunities.

Finally, we optimized and expanded our training regimes to take advantage of more modern methods and broader scope in our live exercises. RED FLAG exercises now offer two venues, Nevada and Alaska, with varied environments; take advantage of Distributed Mission Operations technologies; include Total Force Airmen from the Regular and Reserve Components; and offer the full range of integrated operations, offering realistic training for warriors from across the Services, Components, and our international partners.

#### PREPARE FOR TOMORROW’S CHALLENGES

In addition to taking care of our Airmen and training them for the full-spectrum challenges we expect this Century, it is also our responsibility to ensure our Airmen have the weapons and equipment necessary to provide for our Nation’s defense.

The United States cannot take advantages in air, space, and cyberspace for granted. Today, we are already being challenged in every warfighting domain. The Air Force is actively formulating innovative operational concepts to anticipate, adapt to, and overcome future challenges. We are transforming our thinking from considering the space and cyber domains as mere enablers of air operations to a holistic approach that recognizes their interdependence and leverages their unique characteristics. We will continue to push this conceptual envelope and expand the boundaries of existing tactics, techniques, and procedures to fully exploit the synergies of cross-domain dominance.

But we cannot hone America’s edge without modernizing the Air Force’s air, space, and cyberspace capabilities. We are therefore pursuing the biggest, most complex, and most important recapitalization and modernization effort in Air Force history. These programs will gain and maintain militarily important advantages for our Nation for the coming decades.

#### *Top Acquisition Priorities*

The Air Force’s top acquisition priorities begin to address our critical recapitalization and modernization needs—the new Tanker (KC-X); the new Combat Search and Rescue helicopter (CSAR-X); modern space systems to provide capabilities vital to our Joint warfighters; the F-35A Joint Strike Fighter; and a new Bomber we plan to field by 2018.

Additional high-priority acquisition programs include F-22 5th Generation fighter production; C-17 production; continued production of the C-130J and introduction of the C-27 intratheater airlifter; and expansion of the MQ-1 Predator, MQ-9 Reaper, and RQ-4 Global Hawk UAV inventories.

#### *New Tanker (KC-X)*

The KC-X is our highest procurement priority. It is critical to the entire Joint and Coalition military team’s ability to project combat power around the world, and gives America and our allies’ unparalleled rapid response to combat and humanitarian relief operations alike. KC-X tankers will provide increased aircraft availability, more adaptable technology, more flexible employment options, and greater overall capability than the current inventory of KC-135E and KC-135R tankers they will replace. It is imperative we begin a program of smart, steady reinvestment in a new tanker—coupled with measured, timely retirements of the oldest, least capable KC-135E tankers—to ensure future viability of this unique and vital United States national capability.

#### *New Combat Search and Rescue Helicopter (CSAR-X)*

The Air Force organizes, trains, and equips dedicated forces for the Combat Search and Rescue (CSAR) mission. The Air Force must recapitalize our CSAR forces to maintain this indispensable capability for the Nation and the Joint Team. Purchasing the entire complement of programmed CSAR-X aircraft will relieve the high-tempo operational strain placed on the current inventory of aging HH-60G Pave Hawk helicopters.

The CSAR mission is a moral and ethical imperative. Airmen are responsible for safely securing and returning our Airmen and members of the Joint and Coalition team. The CSAR-X helicopter will provide a more reliable, more responsive capability for rapid recovery of downed, injured, or isolated personnel in day or night, all weather and adverse conditions, as well as support non-combatant evacuation and disaster relief operations.

#### *Space Systems*

Air Force communications, ISR, and geo-positioning satellites are the bedrock of the Joint Team's ability to find, fix, target, assess, communicate, and navigate. While many of our satellites have outlived their designed endurance, they are generally less durable than other platforms and sensors. Over the next 10 years we must recapitalize all of these systems, replacing them with new ones that enhance our capabilities and provide mission continuity, maintaining the asymmetric advantages our space forces provide our Nation.

The WGS system, AEHF, and the Transformational Satellite Communications (TSAT) program will assure a more robust and reliable communications capability designed to counter emerging threats and meet expanding Joint communications requirements.

The GPS II-F and III programs will add a more robust PNT capability to America's established GPS constellation. GPS III will utilize a block approach to acquisition and will deliver enhanced civil and military PNT capabilities to worldwide users.

The Space Based Infrared System will enhance the Air Force's early warning missile defense, technical intelligence, and battlespace awareness capabilities through improved infrared sensing, missile warning, and data processing.

The Air Force will continue to develop space situation awareness (SSA) capabilities to help protect space assets from future threats. We are also pursuing more robust space protection measures to warn of attacks, provide redundant command and control, harden electronics, and defend against direct attacks. The Space Based Space Surveillance (SBSS) system will be the first orbital sensor with a primary mission of SSA. This system, along with other developments such as the Rapid Attack Identification Detection and Reporting System will improve our ability to characterize the space environment—the friends and foes operating in it, and the objects traversing it.

#### *F-35A Lightning II (Joint Strike Fighter)*

The F-35A Lightning II will be the mainstay of America's future fighter force, providing an affordable, multi-role complement to the F-22 Raptor. In addition to fielding advanced combat capabilities, the Lightning II will also strengthen integration of our Total Force and will enhance interoperability with global partners.

The F-35A Lightning II boasts 5th Generation, precision engagement, low-observable (stealth), and attack capabilities that will benefit not only the Air Force, but also the Navy, Marines, and our international partners involved in the program. The F-35A is the Conventional Take-off and Landing (CTOL) variant, and it will replace, recapitalize, and extend Air Force F-117, F-16, and A-10 combat capabilities. The F-35A also serves as the recapitalization program for our international partners' aging F-16s, F-18s, and other 4th Generation fighter aircraft.

Complete dominance of the air and freedom of maneuver for the entire Joint force demand the complementary capabilities of the F-22 and F-35A 5th Generation of fighters. Together, they promise the ability to sweep the skies, take down the enemy's air defenses, and provide persistent, lethal air cover of the battlefield. The leading edge capabilities of the F-35A, in development and low rate production now, will provide an affordable, Joint Service, international complement to the F-22.

#### *New Bomber*

Range and payload are the soul of an Air Force. These capabilities, along with precision, lethality, survivability, and responsiveness are fundamental to modern strategic military deterrence, and apply across the full range of military operations—from tactical to strategic, kinetic to non-kinetic. And yet our Nation has just 21 bombers currently capable of penetrating modern air defenses. Even these B-2 Spirit stealth bombers have limitations and will become relatively less capable and less survivable against advanced anti-access technologies being developed and fielded around the world. Furthermore, our current bomber inventory is becoming more costly to operate and maintain. Indeed, some suppliers for spare parts no longer exist.

The Air Force is therefore pursuing acquisition of a new Bomber by 2018 and in accordance with Quadrennial Defense Review goals for long range strike capability. This next generation bomber will feature stealth, payload, and improved avionics/

sensors suites, and will incorporate highly advanced technologies. It will also bring America's bomber forces up to the same high standard we are setting with our F-22 and F-35A 5th Generation fighters, and ensure our bomber force's ability to fulfill our Nation's and the Combatant Commanders' global requirements.

*Improve our Global Vigilance, Global Reach, and Global Power*

Because Global Vigilance, Global Reach, and Global Power constitute America's edge, we must continually hone our ability to provide them. Our acquisition programs aim to broaden Global Vigilance, extend Global Reach, and strengthen Global Power advantages for America.

*Broaden Global Vigilance*

The Air Force provides the global eyes and ears of the Joint Team and our Nation. Using a vast array of terrestrial, airborne, and spaceborne sensors, we monitor and characterize the earth's sea, air, space, land, and cyberspace domains around the clock and around the world. The information collected through surveillance and reconnaissance, and converted into intelligence by exploitation and analysis, is used to formulate strategy, policy, and military plans; to develop and conduct campaigns; guide acquisition of future capabilities; and to protect, prevent, and prevail against threats and aggression aimed at the United States and its interests. It is relied upon at levels ranging from the President and senior decision makers to commanders in air operations centers to ground units engaged with the enemy to pilots dropping precision-guided munitions.

The future vision of all the United States military Services is information-driven. Success will hinge on America's integrated air, space, and cyberspace advantages. Air Force assets like the E-8C Joint Surveillance Target Attack Radar System, E-3 Airborne Warning and Control System, RC-135 Rivet Joint, RQ-4 Global Hawk, MQ-1 Predator, and our constellations of satellites contribute vital ISR capabilities and networking services that are integral to every aspect of every Joint operation. Our recapitalization and modernization plan aims to dramatically increase the quantity and quality of ISR capabilities, products, and services available to the Joint Team and the Nation. Our recapitalization efforts are focused on extending the life-spans and capability sets of our workhorse platforms, such as the RC-135 Rivet Joint and several space-based assets. We are also working to find and leverage previously untapped ISR capabilities such as those on fighters carrying targeting pods. Finally, we have made a concerted effort to ensure the viability of Air Force space communications, PNT, early warning missions, and SSA capabilities to provide uninterrupted mission continuity for America and our allies.

*Extend Global Reach*

America's Airmen provide the long legs and lift for Joint warfighters' rapid global mobility as well as the long arms for global strike and high endurance for global persistence and presence. On a daily basis, Air Force intertheater and intratheater airlift and mobility forces support all DOD branches as well as other Government agency operations all over the world. Yet the increased demand for their capabilities and their decreased availability underscore the critical need for tanker recapitalization and investment to ensure the long-term viability of this vital national capability.

*Strengthen Global Power*

The United States Air Force provides the ability to achieve precise, tailored effects whenever, wherever, and however needed—kinetic and non-kinetic, lethal and non-lethal, at the speed of sound and soon at the speed of light. It is an integrated cross-domain capability that rests on our ability to dominate the air, space, and cyberspace domains.

The Global Power advantages the Air Force provides the Joint Team ensure freedom of maneuver, freedom from attack, and freedom to attack for the Joint Team. However, failure to invest in sufficient quantities of modern capabilities seriously jeopardizes these advantages and risks the lives of our Soldiers, Sailors, Airmen, and Marines.

*Retire Aging, Worn-Out Aircraft*

The Air Force has been in continuous combat since 1990—17 years and counting—taking a toll on our people and rapidly aging equipment. While we remain globally engaged, we recognize the imperative of investing in the future through recapitalization and modernization. Beyond fielding new aircraft, we must also retire significant portions of our oldest, most obsolete aircraft if we are to build a modern, 21st Century Air Force. Our aircraft inventories are the oldest in our history, and are more difficult and expensive to maintain than ever. They require a larger foot-

print when deployed, and are significantly less combat-capable in today's increasingly advanced and lethal environment. In the years ahead they will be less and less capable of responding to or surviving the threats and crises that may emerge.

Since 2005, we have attempted to divest significant numbers of old, worn out aircraft. However, legislative restrictions on aircraft retirements remain an obstacle to efficient divestiture of our oldest, least capable, and most costly to maintain aircraft. Lifting these restrictions will alleviate considerable pressure on our already constrained resources that continue to erode our overall capabilities.

#### *Preserve America's Aerospace Industrial Base*

America's public and private aerospace industrial base, workforce, and capabilities are vital to the Air Force and national defense. The aerospace industry produced the brainpower, innovations, technology, and vehicles that propelled the United States to global leadership in the 20th Century. The aerospace sector gave birth to the technologies and minds that have made the information age a reality. This key industrial sector continues to lead and produce the technologies and capabilities America needs to safeguard our future.

Yet this vital industry has deteriorated over the last decade. We have witnessed an industry consolidation and contraction—from more than ten domestic United States aircraft manufacturers in the early 1990s to only three prime domestic aircraft manufacturers today. Without funding, in the coming decade production lines will irreversibly close, skilled workforces will age or retire, and companies will shut their doors. The United States aerospace industry is rapidly approaching a point of no return. As Air Force assets wear out, the United States is losing the ability to build new ones. We must reverse this erosion through increased investment.

We must find ways to maintain and preserve our aerospace industrial capabilities. We must maintain national options for keeping production lines open. Complex 21st Century weapons systems cannot be produced without long lead development and procurement actions. Additionally, we must continue our investment in a modern, industrial sustainment base. Air Force depots and private sector maintenance centers have played vital roles in sustaining our capabilities and have become models of modern industrial transformation. We are fully committed to sustaining a healthy, modern depot level maintenance and repair capability.

Furthermore, we must recognize that these industry capabilities represent our national ability to research, innovate, develop, produce, and sustain the advanced technologies and systems we will continue to need in the future. This vital industrial sector represents a center of gravity and single point vulnerability for our national defense.

#### *Extend C-130J Production Line*

Acquisition programs set the stage to field future capabilities. So we must make prudent decisions to maintain current production of advanced systems in order to reach required force structure goals and provide a hedge against future uncertainty. We must maintain and extend the existing production lines for C-130J intratheater airlifters. This aircraft represent America's best technology and capability.

We strongly recommend taking action to ensure these vital production lines remain open. Maintaining current production lines will be critical to revitalizing our force structure, setting conditions for future success, and providing America with the option—should conditions dictate—to produce additional modern, advanced technology aircraft without having to start from square one.

#### *Strengthen Total Force Integration*

The Air Force is dedicated to ensuring our States and Nation get the most combat effective, most efficient force possible to accomplish our mission faster and with greater capacity, around the world and at home. We believe integrating our Total Force is the best way to do that.

America's Airmen set the DOD standard for Reserve Component integration. The Air Reserve Component (ARC)—comprised of the Air National Guard (ANG) and the Air Force Reserve Command (AFRC)—is an operational reserve and an essential element of the United States Air Force. We are developing concepts, strategies, force management policies and practices, and legal authorities to access sufficient ARC forces without the need for involuntary mobilization. Though the Air Force is already the model for melding its Guard, Reserve, and civilians with its Regular Air Force elements, we can and will push this synergy to new levels.

A distinguishing hallmark of the Air Force is the ease with which Total Force Airmen work seamlessly together at home and abroad. From the first Reserve Associate unit in 1968 to the full integration of Guard and Reserve units into the AEF in the 1990s, the Air Force has a well-established history of employing Airmen from all components in innovative and effective ways.

Total Force Integration (TFI) represents a long-term Air Force commitment to transformation. TFI maximizes the Air Force's overall Joint combat capability, forming a more cohesive force and capitalizing on the strengths inherent within Regular, Guard and Reserve elements. Including the ARC in emerging mission areas increases the Air Force's ability to retain critical skills should Airmen decide to transition from the Regular Air Force to the ARC. We will continue to review policies and practices—through our Continuum of Service initiative—to optimize sustainment support to the warfighting force and further integrate personnel management across the Total Force. TFI will be critical to meeting the challenges of competing resource demands, an aging aircraft inventory, and organizing, training, and equipping for emerging missions.

We are leveraging our Total Force to the greatest extent ever. We expect the Total Force to produce the vanguard elements we will need as we expand our leading role in cyberspace and explore new cyber technologies. Many of our most experienced cyber warriors, having attained the high level of expertise required to excel in this domain, are found in our Guard, Reserve, and Civilian ranks.

#### *Total Force Roadmap*

As an integral element of our procurement efforts, we have built a global Total Force Roadmap for acquiring and basing new aircraft and equipment. Just as our AEF construct seamlessly draws upon all of the Total Force components, the bed-down of future Air Force aircraft and equipment integrates Regular, Guard and Reserve Airmen beginning with the first phases of production and basing through Full Operational Capability.

The Roadmap represents a more efficient and flexible force structure. Although the Air Force will have a smaller total aircraft inventory compared to our current inventory of aircraft, overall Air Force capabilities will increase with each next-generation weapons system. In numerous instances, the potential locations will capitalize on Total Force Integration efforts, creating innovative organizational arrangements among Regular, Guard, and Reserve components. This effort takes advantage of the inherent strengths of each component.

The Air Force Roadmap provides a planning construct for the future which, if adequately resourced, will result in the required force structure that will give our Nation the best capability for Global Vigilance, Global Reach, and Global Power across the globe; to reassure allies, to dissuade, deter, and defeat adversaries; and to protect the Homeland.

#### *Secure the Future*

To maximize the potential advantages of our programs in the future, the Air Force is engaging in multiple initiatives to better organize, train, and equip our forces. Whether harnessing the complementary capabilities of the F-22 and F-35A programs to provide Air Dominance for the Joint Team; strengthening our National Security Space Enterprise; leading efforts to acquire interoperable Unmanned Aerial Systems (UAS); developing Cyber Warriors; or pursuing alternative energy solutions with environmentally safe production processes, the Air Force continues to investigate and embrace opportunities to secure Global Vigilance, Global Reach, and Global Power for our Nation's future.

#### *Strengthen Joint Air Dominance*

America's Airmen are understandably proud of their contributions to the Joint fight. Airmen have prevented enemy aircraft from inflicting any United States ground force casualties for over 50 years, and our Nation must maintain the required capability advantages to continue this record in the future. With advancing technology and proliferating threats, the Nation also needs the right equipment for the Homeland Defense mission to protect civilians on American soil.

The F-22 Raptor and the F-35A Lightning II JSF are leading-edge, modern, 5th Generation fighters. They are not modernized versions of old designs. These aircraft reap the benefits of decades of advanced research, technology development, open architecture design, and operational experience. These fighters are furthermore designed to be complementary—the F-22 being superior in speed and maneuverability, and the F-35A being optimized for ground attack and multi-role capabilities. These fighters will provide the advanced warfighting capabilities, aircraft system synergies, and the flexibility and versatility required in future environments and engagements.

Currently in production and fully operational with Total Force units in Virginia and Alaska, and with units planned for New Mexico and Hawaii, the F-22 is the newest member of the Air, Space, and Cyber Expeditionary Force. Airmen are putting the Raptor through its paces—flying and deploying the world's first and only operational 5th Generation fighter. Its attributes of speed, stealth, maneuverability,

internal weapons carriage, advanced sensors, and adaptable, integrated avionics will meet our Nation's enduring national security requirements to gain and maintain Joint air dominance in anti-access environments; provide powerful sensing capabilities and battlespace situational awareness; and precisely engage a broad range of surface targets.

It is vital to our national interests that 5th Generation fighter production capability be preserved. This year the F-35A will continue development and begin its ramp-up to full rate production in 2014. Continuing production ensures the aerospace industry keeps its technical edge, maintains an able workforce to respond to uncertainties, and preserves critical skills and production suppliers. Uninterrupted production in sufficient numbers of 5th Generation fighters remains the lowest risk strategy and best future guarantee for homeland air sovereignty and Joint air dominance.

#### *Lead Joint Unmanned Aircraft System Operational Development*

The Air Force is the world leader for successful, innovative, and effective development, acquisition, and operation of Unmanned Aircraft (UA) and the UAS that incorporate UAs and the command and control (C2) networks and equipment to employ them. Future successful Joint UAS acquisitions and operations hinge upon execution of three critical elements, which align cohesively with Joint doctrine:

*Develop Joint UA CONOPS.*—UA operators serve the global Joint mission through interoperability and interdependence. Globally- and Jointly-integrated UAS operations and capabilities—from strategic to tactical—are necessary for Joint success. CONOPS development must focus on accomplishing the Joint mission as opposed to serving functional components.

*Standardize and Streamline UAS Acquisitions.*—We must develop an affordable Joint acquisition strategy for future UAS development, organization, and employment. Air Force acquirers and operators pioneered UAS development and application in Joint warfare, and have established best practices for organizing, training, standardizing, and equipping the world's most effective UAS operations squadrons.

*Ensure Airspace Control and Awareness.*—Presentation of UA forces and capabilities must meet Joint Commander requirements and objectives. "Organic ownership" of UAS capabilities is irrelevant in the context of the Joint fight and the Joint Forces Air Component Commander's authority and responsibility to control Joint airspace. Homeland operations are also becoming increasingly important. We are working with all the Services and the Department of Transportation to establish Federal Aviation Administration Certifications for UA operations within approved civil airspace.

#### *Lead the National Security Space Enterprise*

Our Nation depends on its space capabilities as an integral part of its military strength, industrial capability, and economic vitality. As DOD Executive Agency for Space, the Air Force will continue to ensure mission continuity in critical areas of communications, PNT, early warning, SSA, and ISR. We will also continue efforts to strengthen National Space integration and collaboration across DOD, with the intelligence community, our interagency partners and our international partners.

Of particular note are our efforts to strengthen America's space professionals and science and engineering workforce. These professionals will form the fundamental corps who will lead our space efforts to success in the future by integrating enterprise level architectures; designing, developing, acquiring, and fielding new systems; and operating in a dynamic and potentially contested environment.

Additionally, the Air Force is developing capabilities to quickly respond to the urgent needs of Combatant Commanders. Operationally Responsive Space (ORS) is a tiered capability consisting of spacecraft, launch vehicles, and terrestrial infrastructure employed in concert to deliver a range of space capabilities to responsively meet Combatant Commander requirements in times of war, conflict, or crisis.

Finally, the Air Force is committed to improving its space acquisitions, focusing on flexibility and affordability. Success in this endeavor depends on achievable requirements, appropriate resources, disciplined systems engineering, and effective program management. We focus all of these efforts through a disciplined block delivery approach tying together basic Science and Technology (S&T), technology development, systems development, and system production efforts so concepts first evaluated in S&T will enable a systematic transition from development to operations.

#### *Lead Cyberspace Operational Development*

Current and potential adversaries already operate in cyberspace, exploiting the low entry costs and minimal technological investment needed to inflict serious harm in and through cyberspace. State and non-state actors are already operating within cyberspace to gain asymmetric advantage.

In April 2007, Estonia was the victim of a barrage of cyber attacks which brought its technologically sophisticated government to a virtual standstill. Insurgents in Iraq, Afghanistan, and elsewhere exploit electronics and the electromagnetic spectrum to kill and maim through improvised explosive devices (IEDs) and propagate their message of hate to the world. Thus, the ability to inflict damage and cause strategic dislocation no longer requires significant capital investment, superior motivation and training, or technological prowess.

We seek to deny our adversaries sanctuary in cyberspace while assuring our access to and freedom to operate in this domain. Our Nation's ability to achieve effects in air, in space, on land, and at sea depends on control of and freedom of maneuver in the cyber domain.

As part of a larger effort to address this need, the Air Force stood up a Provisional Air Force Cyberspace Command (AFCYBER) on 18 September 2007. Our current plan is to activate the AFCYBER MAJCOM on 1 October 2008. The newly designated AFCYBER will consolidate and integrate Air Force cyber capabilities to prepare them to function across the spectrum of conflict. These capabilities will include, but are not limited to: electronic warfare; network warfare; global command and control (C2) integration, and ISR enhancement.

We will continue to develop and implement plans for maturing cyber operations as an Air Force core competency. Our objective is to provide flexible options to national decision-makers to deter, deny, disrupt, deceive, dissuade, and defeat adversaries through destructive and non-destructive, lethal and non-lethal means.

#### *Assure Sustainable Energy*

We are pursuing an aggressive energy strategy and are committed to meeting and surpassing the energy goals mandated by the Energy Policy Act of 2005 (EPAct 05) and other national policies. We continue to pursue a variety of programs aimed at reducing our use of fossil fuels and controlling cost growth. Our vision emphasizes a culture in which all Airmen make energy conscious decisions. We aim to implement our vision with solutions that include alternate sources of domestic energy as well as an aggressive drive for greater efficiency in our facilities, vehicles, and aircraft.

Following Presidential direction to reduce dependence on foreign oil, the Air Force is aggressively pursuing a broad range of energy alternatives. As the DOD's leading consumer of jet fuel, we are currently engaged in evaluating alternative fuels and engine technologies leading to greater fuel efficiency. We have certified the B-52 to fly on a synthetic fuel blend, and are on track to certify the C-17 and B-1 in 2008, the F-22 in 2009, and the remainder of all of our aircraft expected to be certified by early 2011. In fact, on December 17, 2007—the 104th anniversary of the Wright Brothers' first flight at Kitty Hawk, NC—a McChord AFB, Washington-based C-17 flew the first transcontinental flight on synthetic fuel (a 50/50 blend). The Air Force goal is to acquire 50 percent of its CONUS aviation fuel via a synthetic fuel blend utilizing domestic sources. Our intent is to require synthetic fuel purchases be sourced from environmentally-friendly suppliers with manufacturing facilities that engage in carbon dioxide capture and effective reuse. In addition, the Air Force is testing renewable fuel resources that will lower CO<sub>2</sub> emissions significantly compared to petroleum. Other Air Force technology efforts continue to explore high-efficiency aerodynamic concepts, advanced gas turbines, and variable cycle engines providing higher performance and greater fuel efficiency.

The Air Force is the renewable energy leader, and we seek to expand our portfolio through innovative public-private partnerships and evaluations of a wide range of energy proposals at several bases. Last year, the Air Force received the Presidential Award for Leadership in Federal Energy Management. The Air Force also continued to lead the Federal Government in green power purchases, with 37 bases meeting some portion of their base-wide electrical requirements from commercial sources of wind, solar, geothermal, or biomass. We reached full operating capacity—14.5 megawatts—of the largest solar photovoltaic array in the Americas at Nellis AFB, Nevada. At Edwards AFB, California, Kirtland AFB, New Mexico, and Luke AFB, Arizona, we are exploring additional commercial-scale opportunities for solar power. On under-utilized land at Malstrom AFB, Montana, we are exploring the potential for a privately financed and operated coal-to-liquid plant. Finally, as a result of Congressional interest, we have begun considering the potential for small-scale nuclear power production on Air Force property. As energy leaders, the Air Force is engaging with allied and Coalition air force partners to share best practices, identify common issues and concerns, and ensure future, sustainable energy interoperability.

*Maintain Science and Technology Leadership*

True to our heritage over the past century of powered flight, the Air Force continues to maintain the most complex, diverse, and ambitious S&T portfolio of all the Services. History clearly demonstrates the broad benefits to America of our S&T efforts, in terms of military power, industrial capability, economic growth, educational richness, cultural wealth, and national prestige. Examples of these efforts include aerospace technology and propulsion, materials science, advanced computing and communications, atmospheric science, remote sensing, medicine, precision timing, weather forecasting, and satellite navigation. What has been good for the Air Force has been great for America. We are committed to building upon this heritage.

The Air Force S&T program develops, demonstrates, and tests technologies and advanced warfighting capabilities against the spectrum of 21st Century threats. As we continue to adapt to a volatile and uncertain world, today's focused investment in our S&T program will produce the future warfighting capabilities needed to ensure America's continued technological preeminence and military flexibility. Major Air Force S&T efforts include hypersonics, composites, propulsion, nanotechnology, small satellite technology, directed energy, and cybertechnology.

Additionally, Air Force S&T organizations work closely with the other Services, the Defense Advanced Research Projects Agency, Intelligence Community, and other Federal agencies, such as the National Aeronautics and Space Administration, as well as partner nations. Through these partnerships we leverage efforts, share information, and advance state-of-the-art technologies.

The Air Force S&T Program provides the necessary leadership and foundation for future Joint warfighting capabilities, focusing on dominance of the air, space, and cyberspace warfighting domains. Continued Air Force S&T leadership will be critical to maintaining the asymmetric military advantages and broad national benefits our Joint Team and the Nation have come to expect and enjoy.

## AMERICA'S AIRMEN

United States security and prosperity are best assured when all the instruments of national power are orchestrated to work with other states to promote a stable and prosperous international system. The Air Force directly contributes to United States security by providing a unique array of sovereign options for decision makers. These options maximize our ability to assure friends and to dissuade and deter threats, large and small, across the spectrum of conflict. When opponents cannot be deterred, these options magnify the combat capability of Joint and Coalition forces and provide a variety of alternatives for our political leaders to choose from in pursuit of national objectives. We provide the Nation with its most lethal and proven force for defeating enemies across the broad range of threats we face.

By exploiting the synergies of air, space, and cyberspace, the Air Force provides our Nation with the capability to dominate across domains and expand the options available for our sister Services to dominate their respective domains. Implementing our strategy requires fielding a force of highly trained Airmen with a commanding edge in technology and a force structure with sufficient capacity to provide the assurance of United States presence. So long as Airmen maintain a global presence and hold significant advantages over potential opponents, we will continue to provide our Nation with the means to lead the fight for global stability and prosperity.

Our emphasis on assurance, dissuasion, and deterrence reflects our conviction that it is far better to convince potential adversaries to refrain from the use of military force than to have to defeat them in battle. Our success will be measured by conflicts averted as well as conflicts fought and won. But we must never forget that our ability to assure and deter ultimately flows directly from our unambiguous ability to overwhelm swiftly and decisively any adversary who elects to test us.

We are today honing America's edge. Our Airmen have sworn an oath to serve their country, and they are meeting and exceeding their wartime commitments. We remain focused on our Air Force priorities of winning today's fight, caring for our people, and preparing for tomorrow's challenges. We are assessing threats in an uncertain world, balancing our requirements within fiscal constraints, and managing risks as we endeavor to strengthen the asymmetric advantages our Nation and the Joint Team currently enjoy.

We will have neither the buffer of time nor the barrier of oceans in future conflicts. The Air Force's Regular component is smaller in February 2008 than the United States Army Air Forces was in December 1941. The character, tempo, and velocity of modern warfare already severely test our ability to adapt. Therefore, re-defining the Air Force for the 21st Century is an urgent national security requirement—not a luxury we can defer.



America looks to Airmen to provide dominance that spans the air, space, and cyberspace warfighting domains. Our Airmen are fighting today's fight, while standing watch across the frontiers of technology and the future. They need your support today to defend the Nation from tomorrow's threats. Full funding and support for America's Airmen will ensure America's continued freedom of action; increase global awareness; reassure America's allies and strengthen our partnerships; reinforce our sovereign homeland defenses; and set conditions for Joint and Coalition success across the entire spectrum of human conflict and crisis.

We imperil our security, our people, and our way of life if we fail to maintain and sharpen America's Edge—the Air Force-provided Global Vigilance, Global Reach and Global Power advantages which underwrite the defense and sovereignty of our Nation.

Senator INOUE. General Moseley.

**STATEMENT OF GENERAL T. MICHAEL MOSELEY, CHIEF OF STAFF,  
UNITED STATES AIR FORCE**

General MOSELEY. Mr. Chairman, Senator Stevens, distinguished subcommittee members and staff. Sir, if you would allow me to take my time for a verbal statement and introduce six great Americans who wear Air Force uniforms to put a face on your United States Air Force.

But first, sir, to this subcommittee, thank you for the opportunity for Secretary Wynne and I to discuss the posture of the United States Air Force and about our vision for the future and strategy to achieve it.

**SIX AMERICAN AIRMEN**

We brought these six airmen with us today, again, as a face on your United States Air Force and a mix of what this United States Air Force does every day. Sir, I would like to begin with Lieutenant Colonel Brian Turner, a University of Virginia graduate. He is a Virginia Air National Guardsman, classic Air National Guardsman who flies F-22As at Langley Air Force Base, Virginia, in our relationship with the Active and the Guard in the 1st Fighter Wing. He is part of the first Raptor Classic Association. He is a symbol of that ironclad commitment that we have to Total Force integration and to maximizing the strengths of the Guard, Reserve, and Active components. He is part of the 149th Fighter Squadron. He is the assistant director of operations, and he has logged over 3,600 hours in the F-16A, B, C, and D and the F-22A. He has flown over 300 combat hours in Operations Desert Storm, Allied Force, and Iraqi Freedom. One of his roles at Langley is flying the F-22A in Operation Noble Eagle mission tasking which is over Washington, DC, New York, and the east coast to defend the air space of the United States.

Next is Captain Kari Fleming. She is in the 15th Airlift Squadron. She is a C-17 pilot at Charleston Air Force Base, South Carolina. She is a 2003 graduate of the United States Air Force Academy, and Charleston is her first assignment. Still, she has amassed 1,200 total flying hours, including 900 in the C-17, 124 combat missions, 278 combat hours since 2005 in both Operation Enduring Freedom and Operation Iraqi Freedom, missions that include air drop, operational air drops, aeromedical evacuation, and resupply in sustainment of forward bases, as well as main operating bases. She has just returned from a deployment to the United States central command area of responsibility (AOR), and she was telling me

the other day that she has landed the strategic airlifter six times in the dirt on either dirt airfields or unprepared surfaces. Mr. Chairman, who would have thought a few years ago that we would be taking a strategic airlifting asset and landing it in the dirt? She has done it six times and makes it look easy.

Next is Captain Scott Nichols. He's an HH-60 combat search and rescue pilot of the 55th Rescue Squadron at Davis-Monthan Air Force Base, in Arizona. Like Kari, Scott is a United States Air Force Academy graduate and he is also a distinguished graduate from the Air Force Weapons School. Since May 2002, he has been deployed five times, three times to Kandahar in Afghanistan and two times to Balad Air Base in Iraq for Operation Iraqi Freedom and Operation Enduring Freedom. He has logged 2,000 flying hours, including 158 combat hours and 53 combat support hours. During his combat missions, he has recovered special operations aircraft and special operations people. He has recovered the remains of fallen comrades and he has been credited with saving multiple lives. He is a "Jolly Green" combat search and rescue guy.

Sir, as an aside, as a fighter pilot, it is an article of faith that the Jolly Green Giants will come and get you, and this is the face of our combat search and rescue and what we hold so dear inside the United States Air Force as a core competency.

Next is Technical Sergeant Jim Jochum. He's an aerial gunner in the Special Operations AC-130 in Hurlburt Field, Florida, the 4th Special Operations Squadron. He joined the Air Force in August 1989 and spent 5 years as an aircraft maintainer before he joined Special Operations. Since November 1995, he has logged over 4,300 flying hours, 2,500 combat hours on 367 combat sorties in the AC-130, in fact, more than anyone else in Air Force Special Operations Command. Since October 2001, he has accrued 892 days deployed, over 3 years. He wears an air medal with 16 oak leaf clusters. Mr. Chairman, this is the face of Air Force Special Operations.

Next is Technical Sergeant Michelle Rochelle. She is a lead operator in this joint team in cyberspace. She is under the tactical control of U.S. Strategic Command's Joint Functional Component Command for Network Warfare. She executes combatant commander-tasked computer network attack missions and National Security Agency-tasked computer network exploitation missions. Thus, she has direct involvement in the global war on terrorism in supplying strategic intelligence to America's political and military leaders. She represents the vanguard of the forces we are organizing, training, and equipping to operate in cyberspace in this domain for the Nation's combatant commanders. She is a reminder that we believe the cyber domain is critical and the nexus of all warfighting domains for the future.

Last is Technical Sergeant Michael Shropshire, currently the acting Operations Superintendent of the 12th Combat Training Squadron at Fort Irwin, California. This is our interface with the United States Army's National Training Center and our Air Warfare Center at Nellis Air Force Base, Nevada. He enlisted in July 1992 as a battlefield airman, and he has spent his entire career associated with the United States Army. Multiple deployments from Operation Joint Endeavor, Bosnia to Operation Iraqi Freedom and

Operation Enduring Freedom. He has a silver star and a bronze star. The silver star was awarded for individual heroic actions while surrounded, cut off under a hail of enemy gunfire, in the largest sandstorm in four decades in the Middle East. While engaged, he coordinated close air support with the delivery of 12 joint direct attack munitions, or JDAMs, on 10 Iraqi T-72 tanks while constantly switching from his radio headset to his weapon, in fact, killing three enemy soldiers at close range while engaged with his Army brothers. He wears a bronze star for exceptional performance as a tactical air control party member during the 3rd Infantry Division's push on Baghdad.

So, Mr. Chairman, distinguished subcommittee members and staff, I am proud to introduce these airmen to you today because they are manifestations of 670,000 Total Force airmen, from the Air National Guard, the Air Force Reserve, from our air-breathing aviators, and from cyberspace. Everything that we hold dear is manifested in these six airmen.

Thank you again for this subcommittee's strong, consistent support for our country's men and women in uniform, soldiers, sailors, airmen, marines, and Coast Guardsmen. Mr. Chairman, thank you for the opportunity to testify. We look forward to your questions.

Senator INOUE. Thank you very much, General, and to the men and women who were just introduced, we are humbled by your dedication, your skill, and your courage, and we are extremely grateful for the service you have rendered to the people of the United States. Thank you very much.

Senator STEVENS. Thank you very much, Mr. Chairman.

Secretary, General, what the chairman did not say was "jealous," particularly the F-22.

I do think your statement really shows the impact of the Total Force. We all remember the days when the National Guard was flying World War II weary planes when everyone else was getting the F-14s or other planes that were modern, and you have now transitioned to the Total Force. And I am delighted to see that the premier plane of the world is shared by the National Guard, and I am sure that they know how lucky they are to have it. Isn't that right, General?

Let me go to the C-17. We are pleased to have a C-17 pilot here with us today. But there is no funding in this bill for the C-17 this year. It is the third year in a row there has been no funding. We have added money in last years, and it is going to be very difficult to do this year. And I am not being critical. I just want you to help us understand the situation.

You have indicated that you do not plan to re-engine the 60 C-5A aircraft that are in your inventory. You will re-engine 49 C-5Bs and two C-5Cs. But we have, I think, an overwhelming need for more C-17s.

Now, this subcommittee remembers the C-17 too well because on three occasions, three other committees of Congress literally voted to terminate the C-17, and we insisted that it keep going. We have sort of had a paternalistic feeling for the C-17, and I wonder why are we in the position that we are in. And we discussed this between us, Mr. Secretary and General, the other day, but I think it ought to be on the record.

What are we going to do with regard to the C-17? And in particular, the future combat system vehicles will not fit in the C-130. What is their future in view of the limitation on the C-17s?

Mr. WYNNE. Thank you very much, Senator, for the question. What I would like to do is follow through on what I think are the budget implications, and I would ask the Chief of Staff of the Air Force to talk about the movement of the operational goalposts that we have encountered.

#### C-5 AIRCRAFT

But first, I will tell you, when we assembled the budget, there was a lot of uncertainty around the C-5 program. They were going through a Nunn-McCurdy breach. The stipulation was that we were still subject to the laws, that we cannot retire the C-5s. So we had no way to push beyond the 300 aircraft that we were subjected to. So from a perspective of the Department, the program was essentially run out.

We felt that the impact to the industrial base would be too great, but we did not get a hearing on that regard. We simply were told, look, of all of the things that you want, this does not come to the top of the list.

Over the time—and I will let the chief go through the operational impact—this airplane has been an incredible workhorse. This airplane is doing magnificent work, and so as a result of the Nunn-McCurdy finding, we would upgrade only the B aircraft to the 52 C-5M, and we would not do anything other than bring the C-5A up to international standards with the Avionics Modernization Program (AMP). We added to the unfunded requirements list, which yourself and the chairman both referred to, a quantity of C-17s to indicate that times were changing. And the circumstances now merited a relook at this system. And we felt that on the unfunded requirements list, you all should know that your Air Force is worried that we need to make sure that we have this available to us in the future.

Chief.

Senator STEVENS. Well, before you start, if we do not put up some money for C-17s, will that shut down the line?

#### C-17S

Mr. WYNNE. I will have to take that for the record because we have been really working hard to get some international customers to extend that line, but as of yet, many of them are still on hold-out status. What they want to do is they want to have the United States show enough empathy or stick-to-itiveness that they will come on board and they will be supported for the next 20 years. We are trying to be convincing to them that they can do that. I believe that was 14 units that we have so far, and we are getting indications there are around six more out there. If they all come together, it could hold off the closure of the line a little bit.

Senator STEVENS. Thank you.

[The information follows:]

## C-17s

*Production Line Status.*—With no additional Air Force procurement above 190 aircraft, the Boeing C-17 production line will begin to shutdown in 2008. The last contracted foreign customer aircraft delivery is scheduled for June 2008 and the final production line C-17 (Air Force's 190 aircraft) delivers in August 2009. The C-17 aircraft have a 34 month build time. Boeing is currently at risk protecting long lead items for 10 aircraft. Without commitment for more procurement, Boeing may halt production on protected aircraft.

*Foreign Sales Status.*—Australia was on contract for four C-17s. The final Australian aircraft was delivered in January 2008. Canada is on contract for four aircraft; their fourth delivery is scheduled for April 2008. The United Kingdom is on contract for a fifth and sixth aircraft. The sixth United Kingdom C-17 delivery is scheduled for June 2008. There are no other orders for C-17s; however, United Kingdom, NATO Strategic Airlift Capability, and Qatar (2 aircraft each) are potential remaining foreign customers.

Senator STEVENS. General.

General MOSELEY. Senator Stevens, thanks for that question.

First off, we support the President's budget request. Sir, as you know from watching this, this is an affordability issue, and as we fit the priorities that we have tried to work inside the Department inside of that budget, some things just cannot be bought. That doesn't change the operational side of it, but it is an affordability issue, and in supporting the President's budget request, we put those additional aircraft in the unfunded requirements list as an open discussion item that if we had another dollar, where would we spend it.

Sir, on the operational side, I will tell you since we have done the mobility capability study in 2005, we have effectively had some of the goalposts moved on us. We have had the Army and the Marines grow by close to 100,000. We have had the Africa Command (AFRICOM) in the business of being stood up, which will be a direct mobility command requiring mobility assets no different than the Pacific Command because of the size.

We are told that the Army's future combat systems vehicle likely will not fit in a C-130, which means we will have to fly it in C-17s to be able to support the Army deployed.

And, sir, most mine resistant ambush protected vehicles (MRAP's), of course, will not fit in C-130s. Only the MRAP version RG31, category 1 can be transported in a C-130. This MRAP is used by special forces and is currently being produced by the Army and Marine Corps. We are having to fly those in a variety of assets, C-17 as well as C-5.

And then, of course, C-5 reliability piece that the Secretary mentioned on what we are going to be able to afford to modify the C-5s takes us to a lower reliability number on the C-5s.

And then, of course, we are utilizing the C-17s at a much higher rate. I am told that we take about 3,500 or so convoys off the road every month, and we fly close to 9,000 to 10,000 folks off the roads every month in C-17s and C-130s to avoid improvised explosive devices (IED's), to avoid insurgent snipers, et cetera.

So, sir, I think the operational goalpost has moved a bit, but this is still an affordability issue with us, and it is hard to fit all of that into the top line we have got.

Senator STEVENS. Well, I do not know. I was critical of the move from Germany, moving the Air Force down to Aviano. That cost \$6 billion. I would have rather seen that put into assets we need for

the continuing warfighters. But it does seem to me that we are going to have to find some money to keep that line open.

Will you keep us informed about the foreign purchases, Mr. Secretary?

Mr. WYNNE. Yes, sir, we certainly will.

#### ELMENDORF HOSPITAL

Senator STEVENS. Let me ask sort of a question related to our own State. The Elmendorf Hospital is now responsible not only for care of the Air Force units that are coming back from the war zones, but they are also now taking on the duty of taking care of people coming back that have been stationed in Fort Richardson. This has resulted in a shortage of medical specialists to meet the needs of the hospital.

Now, we talked a little bit yesterday about this jointness situation, and Elmendorf and Richardson are really one piece of real estate, and they share that area. I am worried, however, about the Air Force having the money to take care of the Army's soldiers and to give them the care they need. Are you aware of that situation up there, Mr. Secretary?

Mr. WYNNE. Well, sir, first, I want to compliment the people at the Elmendorf Hospital because they have really tried to get Alaskan people to return to the Alaskan area, thinking that it was much easier on the families for them to be taken care of there at Elmendorf than it would be to have the families travel anywhere else. So, first of all, I stand somewhat in awe of the miracles that they can pull off and do.

Second, I am worried about the retention and the recruitment of medical specialists really throughout the services. I think we need to pay some more attention there. I think as this goes on, we will have some stresses and we have tried to address those stresses.

But my first response is I think it was a great idea to put some stress on the hospital to get those Alaska Natives, the people who are assigned up to Alaska, back so their families do not have to be dislocated.

Senator STEVENS. Well, we applaud the decision because, obviously, if they were here at Walter Reed or out at the naval hospital, they are going to be 3,000 to 4,000 miles away from their family and no way to adjust, particularly those who are in a wounded situation.

We applaud the integration of the Fort Richardson care with the Elmendorf Hospital, and I think it is cost effective to do that for the military.

The problem is that it does not seem that the Army is putting in the additional amounts of effort, and you are limited on what you have got. I really think this is a project that has a lot of merit because the Elmendorf Hospital is supposedly the Air Force hospital of the Pacific. Fort Richardson does not have that standing, and it does not have a hospital. I would hope that we find some way to maybe add a wing or something to Elmendorf Hospital so the Army people will feel that they are part of it. We talked about that yesterday too. They welcome the assistance of the Air Force, but they are not putting in much money to help. I think that they

definitely need more assistance there. Ms. Ashworth and I visited those people several times now.

Mr. Chairman, instead of having those people come in and get evaluated here and stay here for 2 or 3 weeks or months, whatever it might be, they are taken home and their people can have access to them. But we need the adjunct facilities that will represent the same type of care and analysis that they would get here, if this is going to work.

I hope you will really pay some attention to that, Mr. Secretary, because I think it is a critical need right now. We have the largest number of individuals per capita in the military today that have served overseas. We are a small population, obviously, but it is a statistic that I think merits an understanding of the need of these people who are coming home that need critical care.

Mr. WYNNE. Sir, care of our wounded warriors is a primary goal of the Secretary of Defense and of myself. What I can do is perhaps have the Elmendorf folks do a patient load forecast that gives you some basis for a look at whether the assets are sufficient.

Senator STEVENS. Senator Inouye points out they have that same situation at Tripler, but there it is the Navy working with the Air Force. I think that this combination of the Army and the Air Force right now is not working that well.

I do want to submit for the record a question about the combat search and rescue helicopter and ask each of you to answer that question. It seems to me that the delay there is something we ought to know about, and what is causing it. I appreciate your concern.

Thank you, Mr. Chairman.

Senator INOUE. Thank you.

Senator Murray.

Senator MURRAY. Thank you very much, Mr. Chairman.

#### TANKER REPLACEMENT CONTRACT AWARD

Secretary Wynne, I have many questions regarding the decision on the aerial refueling tanker, but before I get to that, I must raise a related item with you that I am concerned about.

The week of the announcement of Airbus winning the tanker competition, there was a paper released by Loren Thompson of the Lexington Institute extolling the benefits of the Airbus platform and indicating somehow that the Boeing plane was a lesser plane. That was right after the decision was made. It was prior to Boeing being debriefed and prior to Congress' getting debriefing.

How do you defend the information leaks on this decision from the Air Force?

Mr. WYNNE. I cannot defend it. I have inquired and conducted an inquiry. I would say that I thought it was a travesty for anybody to talk to anybody before we talked to the winning and losing candidates.

Senator MURRAY. Well, what it looked like from our end was that the Air Force was engaging in an ad campaign to fill the papers with misinformation that no one could refute because no one had been debriefed.

Mr. WYNNE. I actually apologized to the Boeing folks about this. It was sort of an unfair, certainly preemptive press article.

Senator MURRAY. Do you believe a violation occurred?

Mr. WYNNE. Ma'am, I do not know that.

Senator MURRAY. I know you stated something similar to that yesterday before the House. It leads me to ask how many other violations have occurred, who else was talked to, what information was given out, who had it, and are there any other leaks?

Mr. WYNNE. I would have to say that we try very hard to hold a very tight hold. I would say that Loren Thompson seems to have sources that are not willing to come forward and say that they were the ones.

Senator MURRAY. So there are sources within the Air Force that were talking to—

Mr. WYNNE. I have no idea.

Senator MURRAY. Clearly, I mean, obviously, there had to be.

Mr. WYNNE. I have no idea where he got his information from.

Senator MURRAY. So how are you going to find out?

Mr. WYNNE. I have no means or mechanisms to force a subpoena on anybody.

Senator MURRAY. Well, that is very troubling because not only am I worried about what appears to be a big ad campaign before anybody could defend anything or have another story that lasted for 1½ weeks, but if someone is talking to Loren Thompson, the question has to be asked who else are they talking to. Were they talking to either of the companies? What was occurring throughout this process? It leaves a big question out there.

No response?

Mr. WYNNE. No, ma'am. I have told everybody that it is improper, and you can only expect that upholding the integrity of the process is foremost in everybody's mind.

Senator MURRAY. Well, I think it leaves a question for all of us on the integrity.

I have to say I am very perplexed by the outcome of this process. After all, the competition was for a replacement of a medium-sized KC-135 tanker, but the Air Force selected an aircraft larger than the KC-10. I mean, what it looks like from my end is that you put out an RFP for a pickup truck to carry three-quarters of a ton, and what you selected, at the end of the day, was an 18-wheeler. It does not get great gas mileage, cannot park where we have parking garages today, and it is a completely different concept. So the decision is surprising, I think, to everyone.

But let me ask you, now that you have selected a much larger aircraft, what will be the associated cost for our military construction budget? Can these Airbus planes fit in the hangars that we have today?

Mr. WYNNE. Ma'am, I have done very little work in where it goes. I will tell you that it is all part of the evaluation that is currently under protest. I will tell you that in the request for proposal (RFP) there was no indication of size, and I will tell you that in the analysis of alternatives for replacing the KC-135, the 330, the 340, the 767, the 777, and the 787 were all cited as potential candidates. Every one of these suppliers knew the competitors' offerings.

Senator MURRAY. Well, Mr. Chairman, in terms of Milcon, I think we have to look at longer runways and larger aircraft hang-



ars. What is the cost of that? And I hope that we will be able to do that.

Mr. Secretary, I have had a lot of conversations about this. I have listened to all the press conferences. I have got to tell you I am left with more questions than answers. It has become very clear that there were many factors that the Air Force did not consider. These include: The pending WTO case that the United States now has against the EU regarding the illegal subsidies that are provided for the development of the Airbus commercial aircraft, the total cost to our Government for military construction, the impact of a subsidized R&D on the cost for aircraft, potential national security implications of outsourcing the backbone of our air superiority to a foreign country.

You know, I have listened to all the Air Force officials like Sue Payton and yourself, and I keep hearing the same phrase again and again. You said it in your opening remarks. "We followed the law and we went by the book." Well, the Air Force seems to be acknowledging, it seems to me, that there are factors of concern that were outside what was required by the law to be considered, like national security. And that leads me to a very important question.

Do you feel the procurement process, as it currently exists, takes into account all of the factors that should be considered when fielding critical defense platforms?

Mr. WYNNE. I will say that the acquisition laws have been layered and layered and layered over the years. They are extraordinarily complex. It goes to alliances. It goes to coalitions. It goes to many aspects of procurement. As you know, the Presidential helicopter is, in fact, an international offering. The combat search and rescue helicopter (CSAR) has international offerings. The C-27 is an international offering. It goes to how much of the industrial base of America is dedicated. You might not know, but you should know that the MRAP's are currently being airlifted by Russian Antonov airplanes from Charleston Air Force Base, South Carolina, because we believe that is the most efficient way to do it.

I think if there is a consideration, it has to go very deep into how much is America willing to invest in its industrial base.

Senator MURRAY. Well, is the current process out of line from your viewpoint with what is necessary to give a complete and accurate picture to meet our defense needs?

Mr. WYNNE. No, ma'am. I think we have gone through this over the last several years, and the laws are very clear in who they allow to be a competitor.

Senator MURRAY. The law is very clear, but I am asking you if you think the current procurement process reflects the needs of our defense.

Mr. WYNNE. I think right now I worry about the industrial base of the future. I think we started to decay our industrial base in 1990, and I think our market does not support a large industrial base right now.

Senator MURRAY. Does the current process put American companies at a disadvantage when competing with subsidized companies?

Mr. WYNNE. I do not know that. I cannot measure that.

Senator MURRAY. Well, Mr. Secretary, this concern is not just about utilizing American ingenuity to meet the needs of the

warfighter. I think we have to consider what an R&D investment in a foreign company could lead to. Airbus and EADS have already given us plenty of reasons to worry about how hard they are going to work to protect American security interests. In 2005, EADS was caught trying to sell military helicopters to Iran. In 2006, EADS tried to sell transport and patrol planes to Venezuela which is a circumvention of U.S. law. They do not have to follow our laws, and that really is a concern for me as a United States Senator.

Do you have similar concerns?

Mr. WYNNE. Ma'am, I will tell you from the standpoint of an ex-official in the acquisition process, I follow the laws of the United States of America to the best of my ability.

Senator MURRAY. I have heard you say that many times, and I think, Mr. Chairman, that is what gives me pause, that the Air Force is following the letter of the law. I think we as policymakers have to think whether, to quote a famous author, "the law is ass." And I think we have to think about whether or not our laws are protecting our national security interests, our economic interests, and our military infrastructure.

I have several other questions, but I will wait for the next round.

General MOSELEY. Senator, might I add a parallel thought to my Secretary? Ma'am, I would also say this is about fielding capability. This is about being able to field systems on time and being able to field systems to replace close to a 50-year-old airplane that has served us very, very well. To be able to look at guardsmen, reservists, or active duty crews, pilots, copilots, boomers, or crew chiefs that maintain old airplanes and tell them that we will wait while we have the technology and the capability to field a new system is something that is not a good feeling for a chief of staff. So this is about fielding capability to be able to fight this country's wars and win.

Senator MURRAY. General, I have fought for a long time to get these refueling tankers built. I represent men and women in my State who fly these. I know they are very old. But I also think we as policymakers have to make sure that we are making the right policy for future decades about our national security and our economic interests for the future and not make a mistake in doing that. I want to get those planes up there. I want my men and women flying the best, but I do not want my national security interest to be at stake as well.

Senator INOUE. Senator Dorgan.

#### B-52 AIRCRAFT

Senator DORGAN. Mr. Chairman, thank you very much.

Let me just put in a good word for old airplanes, if I might. The B-52 has been around for decades. It is expected to last, by your account, by the Defense Department's account, two to three more decades. Compare it and the cost to fly it as a bomb truck to the B-1 or the B-2 bomber, it is one-third of the cost to fly it of the B-2, for example, and much less costly than the B-1. Yet, the Air Force's submission to us is to say we want to continue to put more of them in Davis-Monthan. We want to go down to 56 bombers, B-52s.

We are funding the F-22 because we are told by the military that the F-22 will go in front of everything and knock down all the air defenses, and they will do it before anybody ever sees them. At that point, with no air defenses, the question is which bomb truck do you move in there? Why not the least-cost bomb truck if we are short of money? So that raises this question of the B-52.

#### NEXT GENERATION BOMBER

I am in support of the next generation bomber. The earliest—earliest—possible date would be 2018, but I think all of us understand that is probably not the date that we have the next generation bomber. That is what we hope to have. But between now and then, what do we do?

The Air Force has consistently said to this subcommittee we want you to go from 94 B-52s down to 56. There are 18 of the B-52s that are now attrition reserve B-52s, and they are not at Davis-Monthan because we are waiting for a bomber study that this subcommittee has asked you to do to make sure that we are not headed toward a bomber gap if we stick all of these B-52s at Davis-Monthan.

So having that as a background, having said at least one kind word about old airplanes here, let me ask you, General, what is going to happen with the Air Force and its determinations about B-52s? I think the bomber study was supposed to have been done last fall. I think it is now expected to be out in the next month or two. Can you brief us on that?

General MOSELEY. Sir, my data says the bomber study is undergoing a security review. The Institute for Defense Analyses accomplished this independent study as directed by the Congress. The Air Force only provided assistance by offering factual data and facilitated access to subject matter experts.

Sir, I will tell you 2018 is a timeline that is doable on the new bomber. We have got the plans and programs in place to make that happen, and if we can stick to that, if we can let the industrial base develop and integrate—because in this capability which, of course, we cannot talk much about in this forum, we are asking to integrate existing systems, not necessarily invent new systems. So 2018 is a doable date.

You know from watching bombers for as long as you have, the B-1, the B-2, and the B-52 are wonderful airplanes, but at some point, we have got to have a survivable, penetrating, persistent platform that we can go into any airspace and be able to persist for the combatant commanders. So I am holding to 2018. That is my story.

Sir, on the B-52s, we have had a couple of things that have happened along the way as we submitted the fiscal year 2009 President's budget request. We are now looking, as we discussed before, on taking a squadron of the B-52s and tasking them in the nuclear role, unique away from conventional missions, and we would rotate that tasking like we do with any of the other squadrons in our air expeditionary force (AEF) rotation model.

General Corley, Commander of Air Combat Command, has not come to full detail on this, but I envision taking one of the squadrons for a 6-month or a 1-year effective tasking, either at Minot Air

Force Base, North Dakota, or at Barksdale Air Force Base, Louisiana, and making them exclusively nuclear, taking the other two squadrons and rolling them into the conventional side of this because we still need the ability to go to the western Pacific or into the Middle East.

So, Senator Dorgan, that takes us above 44 combat coded B-52s. Sir, I do not have the total aircraft inventory (TAI) numbers yet because General Corley and I have not been able to sit down and flesh out that rotation.

Senator DORGAN. General, thank you. These bombers are fully paid for. They are, again, one-third the cost to fly on an hourly basis than the B-2. So I think that is good news in the sense that the Air Force has been asking to go to 56, which would leave you at 44 combat coded. I understand what you have just said.

I think all of us will await the bomber study because we want to have good capability. When I said I want to say a good word about old planes, that does not mean—we need new tankers and we need a next generation bomber. I understand that, and this subcommittee I think will work on it.

I want to mention two other quick items. Number one, with the increase in end strength for the Army and the Marine Corps, that raises the question, it seems to me, of whether the Air Force has the capability for airlift, close air support, fire support for the increases in the Army and the Marine Corps. Have you looked at that? What is the situation there?

#### AIR FORCE END STRENGTH

General MOSELEY. Senator Dorgan, we have, and that is our assessment of the 330,000 end strength. Of course this is like the B-52 question. This is an affordability issue, and while we support the President's budget request, we are working hard inside those fiscal limits to be able to fit all of this together. So more to follow on the B-52 side. It is how we put that together and rotate those units at Minot Air Force Base and Barksdale Air Force Base.

On the people side, when you look at our plus-up of unmanned aerial vehicle (UAV) wings, when you look at our plus-up of UAV squadrons and wings inside the Air National Guard, when you look at our battlefield airmen wing that we have stood up, the Army and Marine Corps growth and, of course, the attendant Air Force assignments inside the United States Army, the brigade combat teams, as that grows, our combat search and rescue growth to 141 aircraft, our continued in lieu of tasking, which we have about 6,200 folks deployed under that, and about 20,000 or so total in the pipeline working either going to training or coming back, and then you look at the options on a provisional cyberspace command to be able to look at that as a force provider for U.S. Strategic Command, sir, that takes us to 86 wings to meet the national military strategy, the combatant commanders demands, our rotation and sustainment model of our 10 AEF's and our abilities to provide the capabilities and the capacity forward. That takes us to the 86 wings and it takes us to that number of about 330,000.

## UNMANNED AERIAL VEHICLE ACQUISITION

Senator DORGAN. Is your UAV acquisition on track? We have a Grand Forks submission for the UAV. Is the acquisition for Predators and Global Hawks on track?

General MOSELEY. Sir, with the existing funding, it is. We have asked in the unfunded requirements list not only for the money for the B-52s, we have asked for a consideration for the growth in our end strength, and there is also growth in there for additional UAV purchases.

Senator DORGAN. Mr. Chairman, I want to just make one other comment that I want to talk to you about that is not in this hearing. I have been taking a look at what has been happening with privatization in the military, more in the Army, for example, than in the Air Force, but the Air Force is moving, I think, rather aggressively now. The hundreds and hundreds—well, billions of dollars of new housing stock, for example, at air bases. My understanding is that there is a proposition to privatize and that we will take new housing stock that has been built on air bases and we will give them, free of charge, to a private contractor who will sign a contract and agree to maintain them for 50 years. As I began, my first thought was, well, that cannot possibly be the case. I mean, that is preposterous.

But as I began looking into what has been happening on the Army side and what the proposals are on the Air Force side, I want to have a longer conversation than we would be able to have here about this issue of privatization of housing on military bases whereby we have new stock that has cost us a lot of money and we will turn that over, free of charge, to a company who will sign a contract for 50 years. A whole lot of companies are not in business after 20 or 30 or 40 years, and we are going to give them the free housing stock.

I will not ask you to answer that, but it is something I have become interested in trying to understand to determine does this really meet any kind of common sense test in my hometown cafe. So, Mr. Secretary, if you and I and General Moseley can at some point meet and I can better understand what—

Mr. WYNNE. I think we need to bring you the entirety of the business plan and we would just have to explain it, and you can certainly take a judgment from that.

General MOSELEY. Senator Dorgan, one last reminder. Those 86 wings are Total Force wings. That is a mix of Air National Guard, Air Force Reserve, and Active Duty because you know from watching us, we do not do anything that we do not do as a Total Force.

Senator DORGAN. Let me just finally say, before my colleagues are called on, it is inspiring for you to bring some of your airmen along. And to think of landing a C-17 on a dirt track someplace in the world—we have got young men and women who do extraordinary things all around the world. You inspire this committee by bringing them to us. Thank you very much.

Senator INOUE. Thank you.

Senator Domenici.

Senator DOMENICI. Mr. Chairman, thank you.

General Moseley, it is great to see you. I am very sorry in your new job and in my new role here I do not see you as often as I used to. But I can see you and hear about things that are taking place in the Air Force, and I am very proud of your regime and hope that things are going as well as you had hoped and planned for.

I do want to make an observation with reference to infrastructure for manufacturing or the manufacturing capability in America and just to give you the benefit of my own observation, which leads me to conclude that it must be very difficult for you people who serve us to try to get large manufacturing contracts issued in a timely manner, then live up to expectations, because the United States is not what we were, contrary to what our people think and what a good face you put on. We have substantially lost our manufacturing capability, and we are not doing very well at getting it back. In fact, it is getting worse.

And I will tell you one thing that is contributing immensely to it, General. We got by with it before, but \$100 a barrel oil is ripping America right to the bone. We are getting poorer with every passing week as we pay \$100 a barrel for oil. It is destroying America in ways we do not know right now, but it is happening. We are truly getting poorer as a Nation every day of the week, every week of the month, and every month of the year.

How could we not when we were dependent for so many years? Well, it is one thing to be dependent at \$20 and it is another thing to be dependent at \$100.

Now, having said that, I am not going to talk about the macro problems. I will let the other Senators who have just done that do so. I am going to talk about New Mexico a little bit with you because we have some exciting things happening there.

Holloman Air Force Base is scheduled to become home to two F-22A Raptor Squadrons. Right? I appreciate the Air Force budget request for Milcon for Holloman associated with the new squadrons. If funds are appropriated by Congress, when will that construction be completed?

General MOSELEY. Sir, I believe that is about 2011, but if you will allow me to take that for the record, I will get that information to you.

Senator DOMENICI. I would appreciate it if you would give that to us.

[The information follows:]

F-22 MILITARY CONSTRUCTION AT HOLLOMON AFB, NM

Construction completion dates for the five fiscal year 2009 F-22 military construction projects for Holloman AFB, NM are shown below:

[Dollars in millions]

Project Title	Programmed Amount	Estimated Completion Date
F-22 Add/Alter Flight Simulator Facility .....	\$3.2	March 2010
F-22 Add/Alter Aircraft Maintenance Unit .....	1.1	October 2009
F-22 Add/Alter Jet Engine Maintenance Shop .....	2.2	January 2010
F-22 Alter Hangar Bay for Lo/Composite Repair Facility .....	14.5	September 2010
F-22 Aerospace Ground Equipment Facility .....	4.6	March 2010

F-22 MILITARY CONSTRUCTION AT HOLLOMAN AIR FORCE BASE, NEW MEXICO

Senator DOMENICI. Are the F-22s still slated to begin arriving at Holloman the first quarter of 2009?

General MOSELEY. Sir, I believe so. We have not changed any of the delivery dates. But also, let me take that for the record to get you an exact time.

Senator DOMENICI. Would you do that?

[The information follows:]

F-22 DELIVERY SCHEDULE TO HOLLOMAN AFB, NM

The first F-22A should actually arrive at Holloman Air Force Base, New Mexico in the third quarter of fiscal year 2008. Maintenance training begins at Holloman in June 2008. Current plans show additional aircraft begin arriving in December 2008 at a rate of approximately two per month. The final contract delivery date of the 40th F-22A for Holloman is the second quarter of fiscal year 2011.

Senator DOMENICI. Will you tell us a little bit about the plan to utilize the Air Force Reserve at Holloman as part of this new mission?

TOTAL FORCE INTEGRATION

General MOSELEY. Sir, we believe that of all of our new systems, when we field a new tanker, the C-17, the F-22, the F-35, everything that we do we do as a Total Force. The Virginia guardsman sitting behind me here is a lieutenant colonel who flies the F-22 at Langley Air Force Base in the 149th Squadron, which is a Virginia Guard squadron.

Also, the Air Force Reserve will fly the airplane at Elmendorf Air Force Base in Alaska and at Holloman Air Force Base in New Mexico, and the Air National Guard will have the lead on the squadrons in Hawaii at Hickam Air Force Base. And as we flesh those wings out, we will have better capability in the Total Force with a lot more access to a lot more talent and skill. So, sir, of the four operating locations that we have now, we have two Air National Guard and two Air Force Reserve embedded alongside the Active.

We have been in some discussions with the Air National Guard also on some other options for beddown of the airplane. Those are exciting, but we are still facing affordability challenges and affordability issues which gets us to the numbers of airplanes and the capacity. Sir, we continue to work that.

F-22A

Senator DOMENICI. Well, I understand the Air Force needs more F-22s. Would you tell us about that either for the record or now?

General MOSELEY. I will speak for me and then let my boss parallel. But we support the President's budget request, and the numbers that we have now are 183. And those are affordability issues, and the affordability piece of this is to continue to try to balance our allowance inside the Department.

Mr. WYNNE. Sir, we were very pleased that the Secretary of Defense and the President determined that they could allow the next administration to make the judgment call and that they had said by letter to the Congress that they were intending to put four additional airplanes in the fiscal year 2009 supplemental request. We

worry and have personal views on that, but we support the President's budget request as submitted.

Senator DOMENICI. My last question has to do with something that I think is dear to your heart, and that is Cannon Air Force Base because that is the home of the new Air Force Special Operations Wing. That is something brand new and you are dedicated to making it work. We are dedicated to help you, if we can, make it work.

From an Air Force perspective, how is this new mission proceeding so far?

AIR FORCE SPECIAL OPERATIONS—CANNON AIR FORCE BASE, NEW MEXICO

General MOSELEY. Sir, this is very exciting for us. We have a base now with an attendant range which is Melrose, with an attendant association with the White Sands Missile Range, an attendant association with the New Mexico Air National Guard on a variety of levels, an attendant relationship with the 49th Wing at Holloman Air Force Base and in the restricted airspace, with an attendant with the Army at Fort Bliss, Texas. So from Melrose Range through the restricted areas, all the way to the White Sands Missile Range and Fort Bliss through Holloman Air Force Base to Cannon Air Force Base, we now have some opportunities to do some very, very creative training. We have the open airspace, the training ranges, and the gunnery and bombing ranges that we need out of Holloman and Cannon Air Force Base. But I think equally important, it gives us an incredible capability to marry Guard, Reserve, Active, as well as partnerships with the Army.

And so, sir, we have been very, very pleased that we have had a chance to work with the community and get those ranges certified so we can fire our 105 millimeter and all the guns that we have on the AC-130s and perhaps even the new potential on an AC-27 with a 30 millimeter gun that we will be able to use there. So, sir, this has got some real exciting opportunities ahead of us.

CONSOLIDATED COMMUNICATION FACILITY—CANNON AIR FORCE BASE

Senator DOMENICI. General, I know I have passed over my time by a bit, but the Air Force needs a consolidated communications facility at Cannon. We know it is needed. Can you tell us when does the Air Force intend to budget for it?

General MOSELEY. Sir, we have talked to our communications folks about that, and if you will let me take that for the record, I will get you a funding line and an operational capability date.

[The information follows:]

CONSOLIDATED COMMUNICATIONS FACILITY AT CANNON AFB, NM

The Air Force plans to program/budget for this communications facility in fiscal year 2010. Given no delays due to award protests, modifications, or weather, the Air Force estimates the initial operating capability for the facility will be in the spring of 2013.

Mr. WYNNE. Sir, if I can add. We are very excited about the integration effort, and that is the area where the simulation facility and the communications facility is targeted to make the most out of all of these assets that the Chief of Staff has enumerated.



Senator DOMENICI. Mr. Secretary, I want to tell you that this base becoming a completely different kind of Air Force base is exciting, and I think it is exciting that you got it started. It got started under your leadership. It is something the Air Force will be looking at and lauding for quite some time in my opinion. Thank you.

General MOSELEY. Senator, it also lets us wrap up that unit at Albuquerque, New Mexico, which is such a historically capable unit. As you know, we are looking at the follow-on capabilities, the follow-on opportunities for that unit, but when you think about Albuquerque, you think about Kirtland, Cannon, and Holloman Air Force Bases, and the White Sands Missile Range, and Fort Bliss, Texas. There are some wonderful opportunities out there because of the communities, but also because of the ranges and the size and expanse of the ranges, which is exactly why we put the F-22 at Holloman Air Force Base and we are looking at the Special Operations wing at Cannon Air Force Base.

Senator DOMENICI. Thank you very much.

Thank you, Mr. Chairman.

Senator INOUE. Thank you.

Senator Shelby.

Senator SHELBY. Thank you, Mr. Chairman.

A few observations and then a couple of questions to you, General and Secretary Wynne.

#### TANKER REPLACEMENT CONTRACT AWARD

Regarding the tanker situation, in competition there are always winners and losers. Some States win, some States lose. I understand that well. In this case, if this goes through, as I hope it will, Mobile, Alabama will become an industrial base for the assembly of these tankers and probably other things. Today we only have, as I understand, Toulouse, France and the Seattle, Washington area that are capable of doing this. We will have more capability.

But I also believe that if the Air Force and Members of Congress wanted the tanker program to be a job creation program for a particular company, they would have scrapped competition. We all benefit from competition. The Air Force benefits from competition. Instead, the intent, as I understand it, General Moseley, was to provide our men and women, the warfighters, with the best air refueling aircraft in the world at the best value for the American taxpayer. Is that correct?

General MOSELEY. That is correct, sir.

Senator SHELBY. It is also important to note, according to the Congressional Research Service, Congress has never—never—intervened to overturn the outcome of a competitive source selection.

Now, you alluded to it, Mr. Secretary. We do have a regular order here. The Air Force made a selection after looking at the criteria. I understand that Northrop-Grumman-EADS plane was judged superior in four out of five of the main measurements and tied, I think, for one. But there is a due process here. I understand that Boeing, as they have a right to, has protested. That goes to the Government Accountability Office. They have 100 days, I understand, to evaluate all aspects of this bidding process, and they can—and correct me if I am wrong—ratify the process that went

on, the selection process, amend it, or reject it and recompetes. General Moseley, do you want to talk about that?

General MOSELEY. Sir, that is my understanding.

Senator SHELBY. It is due process. Is it not, Mr. Secretary?

Mr. WYNNE. Yes, sir. Boeing has exercised that right.

Senator SHELBY. And we will await that. That is something that we have set up for the Government Accountability Office, an arm of Congress, to look at this objectively. Is that correct?

Mr. WYNNE. Yes, sir, and we have asked the tanker program office to work closely with the GAO and answer every question that they are asked.

Senator SHELBY. Is that right, General Moseley?

General MOSELEY. That is my understanding, sir.

Senator SHELBY. Thank you.

Thank you, Mr. Chairman.

Senator INOUE. Senator Bond.

Senator BOND. Thank you very much, Mr. Chairman.

Thank you, Secretary Wynne and General Moseley, for appearing before the subcommittee today.

#### AIR FORCE MODERNIZATION STRATEGY

As I discussed with you last year and the year before, I remain extremely troubled and concerned about Air Force management, its current modernization strategy, and its unwillingness to consider alternative courses of action to meet current and future threats. The current Air Force strategy fails to address sufficiently the impact on the industrial base, particularly that of the fighter industrial base in St. Louis, which on its current path will be out of fighter production business in 2013. And through sole-sourcing of the F-35 Joint Strike Fighter, a stupendously bad decision I warned against before it was made, it has diminished competition, resulting in significant delays and resulted in tremendous cost growth because there was no competition.

Just today, the GAO has released a report indicating that the F-35 costs are going to hit \$1 trillion—trillion with a T. And they say the costs went up \$23 billion last year alone. GAO found that the program has been dogged by delays, manufacturing inefficiencies, and price increases. That comes as no surprise when there is no competition. The GAO said costs have gone up by \$23 million and the auditors said they expect development and procurement costs “to increase substantially and schedule pressures to worsen based on performance data.”

Now, I am also told that there will most likely be a Nunn-McCurdy breach on the F-35, but somehow the Defense Acquisition Board is claiming scheduling delays which delays the announcement of what I believe is inevitably a Nunn-McCurdy breach and possibly delays our taking action in this subcommittee to deal with the problems of a Nunn-McCurdy breach.

Now, the F-22, the F-35, and the C-5 RERP program all have tremendous cost growth and/or delays to various degrees as well. Yet, the Boeing St. Louis industry team has consistently delivered to its Navy and Air Force customers platforms that pound for pound and dollar for dollar are the best in this fiscal environment and are the most effective at defeating the current threats.

Air Force costs for major programs are depleting the highly skilled and difficult-to-replace workforce necessary to build the next generation of manned and unmanned aircraft. These high costs result in the inability of the Air Force to equip fully the future force which usually results in much fewer flying missions for the Air National Guard as well. With the cost overruns and the lid on the purchase of F-22s, we all know there will never be enough F-22s to supply the Air Guard with those planes and continuing to purchase those unduly expensive planes will make it impossible to fill the gaps with other aircraft that are needed.

We saw this coming in the BRAC 2005 process, again, flawed process, regrettably. I think major mistakes were made.

And recently, of course, as my colleague from Washington has pointed out, the Air Force made the decision to award a large portion of a \$40 billion contract to a Government-subsidized European company, and it now looks like the Air Force's entire analysis may be half-baked. The Air Force has a lot of explaining to do about the waste of taxpayer dollars on excessive base construction at Air Guard bases to accommodate the European model, and I do not believe that was ever taken into account. We cannot find anybody in the Air Guard who was asked about how much construction, how much Milcon costs would go into making their facilities large enough, strong enough to handle the European model. And there was a total lack, as far as I have been able to find out, of coordination with the Air National Guard during consideration of these costs.

Not only did the Air Force make the decision to award that contract to a Government-subsidized European company, but the more we hear about it, it sounds like the entire selection process has raised serious questions and will, undoubtedly, add many hundreds of millions of dollars to Milcon.

Flawed Air Force policy is going to put the jobs of hard-working American men and women at risk, as well as further diminishing—and it is important—further diminishing the long-term U.S. competitive capacity, workforce skills, and supplying the aircraft we need to meet the ongoing missions. In the current fight against terrorism, we need capable, proven platforms to accomplish those missions. I think everybody here knows we need more C-17s to push cargo into the theater, to conduct all the tasks that you outlined. And we have to rely on Russian-made Antonov AN-124 transport aircraft to transport MRAP's overseas? To me that is inexcusable and a little bit embarrassing. And the C-5 RERP program is confronting significant costs in scheduled programs.

Now, if you take a look at what is available and what the needs are, I continue to believe that we need F-15 Strike Eagles with significant payload and range to put bombs on targets in places like Afghanistan and Iraq. F-22s may defeat high-tech enemy fighters, but they cannot deliver ordnance on caves and bunkers in those countries. We need modernized F-15s, F/A-18s, and F-16s with AESA radars and integrated electronics. These are the ideal platforms for putting bombs on the target, defeating the enemy. Additionally, more modernized F-15s and F-16s are needed for the air sovereignty alert mission, paramount to defending U.S. airspace.

Continuing to put all the emphasis on buying F-22s is not going to get the job done for our homeland security.

Now, on the other side, the Navy's acquisition strategy has recognized that an expected shortfall in modernization dollars may require an adjustment in the mix of aircraft necessary to equip the future force. They have adopted a plan B. Why has the Air Force not? I know the figure of 383 F-22s is based on your required force model, and we all know that that is what the Air Force's plan A is. However, plan A is unrealistic. We do not need F-22s to hunt terrorists or perform air defense missions over the homeland, and it is unsustainable in the current fiscal environment. Where are we going to come up with \$20 billion a year to recapitalize the Air Force?

The Air Force has been told this by civilian leadership repeatedly, from Secretary Gates to civilian leaders in DOD and the Congress, and yet, it does not appear, at least to me, that you have a plan B. The Air Force, like the Navy, needs to come up with a plan B that addresses the reduced number of F-22s.

And after today's report, the reduction in F-35s due to continued cost growth and delays in fielding, such a plan B, I would suggest to you, for TACAIR looks like something like a mixture of F-22s and modernized legacy platforms like the F-15 and the F-16. Failure to do so is going to leave a huge gap in our force structure, creating unacceptable risk, and I would regret to tell my friends in the Air Guard that they are likely to be history unless you start buying airplanes that we can afford and they will be able to fly.

There are significant challenges before the Air Force that I look forward to working with you on to address. I share your commitment to ensuring our Air Force continues to maintain air dominance, but I hope you will be more receptive to discussing realistic alternatives.

I will submit my questions for the record. We have had these question and answer sessions in the past, but my statement today reflects my grave concern that we have not gotten from plan A, which is not going to happen, to plan B, which could happen.

I thank you, Mr. Chairman.

Senator INOUE. Thank you very much.

Working toward common goals in a joint environment without compromising service-specific principles, culture, and tradition makes good sense. However, I question whether it is realistic, and I would like to get your thoughts on how you think this can be successful. Or do you see potholes on the way?

Mr. WYNNE. Well, sir, I would say it this way, that there are always economies to be done by doing things together where you can have a service provider in a region. Much like Senator Stevens talked about on the hospital, if you would get to the right size at Elmendorf Hospital, you can service the patient load up there. That does not mean that you should not have a ready clinic on Fort Richardson, for example.

But I think at the local level, I would like to see the local commanders come to an agreement. I think they have the best perspective and the best view as to where the savings could accrue in a joint service environment, and I believe there is a need for that.

And I think the services should remain in the organize, train, and equip functions.

And we should not lose sight of the local level because I believe that is where our morale is. Many times that is where our culture exists. It does not really exist here in Washington, DC, although we are surrounded by culture. It really exists at the local level in the field, whether it is Shaw Air Force Base, Charleston Air Force Base, or McGuire Air Force Base. All of that is where the Air Force culture is, and I know my colleagues in the other services feel precisely the same way. The Navy reveres Pearl Harbor. We revere Hickam Air Force Base.

Senator INOUE. Does the joint basing agreement permit this type of localized control?

#### JOINT BASING

Mr. WYNNE. At the present time, I think the decisions look to me like they are going to be made very centrally. We have a decision that has been rendered that takes away some of the control that the service secretaries might have in the process. It is done with the thought that economics should rule over culture.

I would say that at present I worry about the impact as we proceed down that road, and I particularly have concerns where the Air Force has made investments and now we will be forced to essentially petition through another service. I worry that it might be confusing to the subcommittee as to why is it that the Air Force hangars are being pursued by the Army or the Navy. Why is it that the Army barracks or ranges are being pursued by the Air Force? I am not concerned today because today the mission is overwhelming. I am concerned about 3, 4, or 5 years from now.

Senator INOUE. Am I to gather from your response that we should set this joint basing agreement aside for at least 1 year to give the service chiefs and service Secretaries time to reflect upon it?

Mr. WYNNE. Well, as a believer of the BRAC, as you remember from the Government side, I had a vision for joint basing that would be concluded by 2011 on an agreement basis. I do not think a year delay would affect us. However, I understand everybody has got a good sense of trying to get on with it. I would in the year, rather than put it on a hold basis, ask to generate local agreements to see what could be done and what is appropriate to be done because I do think that there are some savings out there, and I know doing it properly, there is some money to be saved.

Senator INOUE. General Moseley.

General MOSELEY. Sir, I think it is well understood in the services that we organize, train, and equip by service, by domain. The United States Army is the finest army in the world and it operates to dominate the land domain. The same with the Navy for the maritime domain. We have Special Operations, and for the Air Force, we live to dominate air and space, as we are all looking together at a cyberspace domain. We recruit, we train, and we develop, and we promote, and we command as services. We fight jointly but we operate and organize training and equip functions under the title 10 of the U.S. Code.

My competencies are not land or maritime, nor is my service. If the Joint Chiefs were all standing here together, we would say that we bring together the things that matter for a combatant commander. I have listened to and learned from an Army Chief and a Chief of Naval Operations and a Marine Corps Commandant relative to their domains. And so anything that begins to fuzz those lines or anything that begins to inhibit the ability to organize, train, and equip, sir, I think we have to take a look at.

And I believe joint basing is a good idea. I believe looking at the services capability—and I do not mean services as Army, Navy, Air Force, Marine Corps, but base operating support and services to look at synergies to be able to save money, save resources is a wonderful idea and we should pursue that. But as we begin to look at things that impact command authority or execution of the command, then I think we have to be very careful.

Senator INOUE. I personally think you have made your case and we are going to work toward that.

May I ask another question? What is the latest status of the combat search and rescue helicopter?

#### COMBAT SEARCH AND RESCUE HELICOPTER

Mr. WYNNE. It has, as you know, also been subject to a GAO review on a couple of occasions. We hope to get resolution by August or September of this year. Once it gets into a process like this, we are asking for resolicitations. Those have been in. Now we are in the process of reevaluating the outcome.

General MOSELEY. Mr. Chairman, I would like to add an operational piece to this also. This is about being able to go pick people up in combat. The United States Air Force does this for the entire joint team. It is a core competency for us, and I believe it is a moral imperative to be able to go pick up a downed person or a party. That is what we do for combatant commanders in the Pacific and combatant commanders in Europe and in Southern Command and also in Central Command. And this captain sitting behind me has dedicated his life to be able to do that.

So the notion of being able to get on with this and field the capability and give it to our squadrons so we can get into a much more capable, survivable, penetrating platform is my desire. And that is why the two of us have made that the number two acquisition priority in the United States Air Force.

Senator INOUE. I concur with you, sir. I have had some experience. It took me 9 hours to be evacuated from my point of combat to the field hospital, and with this new combat search and rescue helicopter, you might be able to do it in 15 minutes. That is the difference between life and death. You have my vote.

Mr. WYNNE. Yes, sir.

Senator INOUE. Senator Murray.

Senator MURRAY. Thank you, Mr. Chairman. I appreciate the time.

Mr. Secretary, despite the leaks that have apparently occurred that allowed a spin to be created out there for some amount of time, I do want, for the record, to ask you, because I know you have said this already. Both planes were good planes in the competition.

Mr. WYNNE. We would have been proud to fly in either one.

Senator MURRAY. Thank you, Mr. Secretary.

For the record, on behalf of myself—and I know that the Senator from Alabama has good reason to be excited about the potential for some jobs in his State. We have worked hard together on many, many issues—I would say that I think competition is great, and I encourage competition.

But I think we all ought to give great pause to the fact that this is not a level playing field when one of the companies is heavily subsidized and, therefore, can offer a contract at much less cost, to the detriment of a United States company. So I think that is a question that really should give us all pause, and I know that I will be pursuing that in other places as well.

Mr. Secretary, I wanted to ask you. I know you cannot answer any questions about the contract itself. I understand the process that we are in and I understand the proprietary information. So let me go away from that and ask you a philosophical question that I wonder if you have pondered: Is the United States Air Force ready for another country's air force to have the same capabilities that we do?

Mr. WYNNE. Well, it very much depends upon the character of the device or airplane that it is. I would say the Air Force would prefer to be the dominant air force in the world in probably all of its aspects.

That having been said, the way that the competition is rendered, I think that we husband now a lot of the inner technologies that allow us to be the most lethal air force in the world, and we have—

Senator MURRAY. But does it concern you?

Mr. WYNNE [continuing]. Front-loaded some of the logistics.

Senator MURRAY. You mentioned earlier that you are worried about our military complex. Does that concern you?

Mr. WYNNE. I am very much concerned about the industrial base in air, the industrial base in space, and we have an emerging industrial base in cyberspace, and I hope they stay with us.

Senator MURRAY. Well, let me talk about national security for a minute. I think we all know that the Air Force is the finest in the world, exemplified by the amazing men and women behind you. And I congratulate and thank each one of them. The all-volunteer force has been flying nonstop in defense of our Nation. They have done an incredible job. I am extremely proud of the two Air Force bases in my home State and the men and women who serve there.

But what really perplexes me is that when we procure new assets for the Air Force, the leadership does not take into account the wider view to include the preservation of our domestic aerospace industry when it outsources contracts. My understanding is that the Navy, in fact, does, Mr. Chairman, have rules regarding domestic production of our assets. Why does the Air Force not have the same requirements?

Mr. WYNNE. Ma'am, I would say it this way, that the shipbuilding industry is a powerful force in our economy and in our marketplace, and we would actually like a similar caucus to appear as with the aerospace industrial base to focus on the aerospace industrial base. And I am not really just talking about the prime

level, but at the third tier and the fourth tier, people that are essentially ignored when we come even to questions like long lead and we do not realize that the landing gear manufacturer down in the fourth tier or the supplier to the landing gear manufacturer cannot make a market with a very low or ignored long-lead funding.

So I would tell you that where I am it is very hard to essentially structure a competition after the competition has concluded. It would have been much better to structure the competition in advance.

Senator MURRAY. Well, we are where we are, and the reality of what we have not done in the past is now in our face, and I think it is something we seriously need to look at. I think you would share that concern.

Mr. WYNNE. I think the way that our industrial base is shrinking, especially in the aerospace and space industry, is something that the Congress should take a look at.

Senator MURRAY. I am hearing from a lot of my constituents and people across the country who—obviously, the economic times when our economy is headed toward a recession, if not there, the fact that we are spending \$40 billion, maybe more, for jobs that will be mostly overseas is, I think, particularly distressing to a lot of Americans.

But let me leave that aside for a minute and focus really on the national security implications of a contract like this. If this contract is carried out and goes to Airbus, France, Germany, others, Russia, what happens in the future if one of those governments disagrees with us on foreign policy? What if they decide they want to slow down our military capability for whatever reason? What is the Air Force's plan if Airbus pushes back deliveries?

Mr. WYNNE. Well, right now we have an agreement among allies. You are reaching into policy areas where I really have no knowledge. I can only tell you that the agreements and the suppliers that we have on that particular airplane have been loyal to American policy for decades and decades and decades. So I really cannot go out there and now declare somehow that because they have been judged winners and they intend to provide 25,000 jobs here in America, that somehow they are, downstream, going to be bad.

Senator MURRAY. Though we cannot predict the future, what if they decide they are not going to do replacement parts because of some policy that we have that they disagree with; whether it is our policy in the Middle East or elsewhere?

Mr. WYNNE. I really hesitate to go anywhere near that.

Senator MURRAY. And these were not questions that you mulled about in going through in awarding this contract at all?

Mr. WYNNE. No, ma'am. They were not aspects of the law that we followed.

Senator MURRAY. And I keep hearing you go back to that darned law.

Okay. Well, let me ask you about another issue because from what I have been reading in the press, the main shareholders of EADS, France and Germany, have been working to usurp the authority to deny investment in Airbus by other foreign entities and countries. And that effort has been stymied by the EU, therefore



adding the possibility that holdings by Russia and the UAE could be increased from their current levels. It also adds the possibility that other foreign governments could become part owners of Airbus.

Was this instability of EADS considered at all, and if so, was it factored into the aggregate risk associated with the KC-45A bid?

Mr. WYNNE. I do not believe that was a consideration. It is not a consideration in any competition that we are in.

Senator MURRAY. So when we talk about risk and we are looking at those kinds of risks, you do not take into account that entire—

Mr. WYNNE. We assess the financial capability of the company as a part of a manufacturing look. This is a very stable financial company, a lot of sales around the world, competing, going to compete for, I believe, 25,000 airplanes over the course of the next 20 years. They looked very stable to us.

Senator MURRAY. Well, Mr. Chairman, I know I have taken considerable amount of time here. It seems to me that this hearing for me has raised as many questions, if not more, than I came in with. I obviously have serious concerns about our national security. I think every Member of Congress should. I have serious concern about awarding a contract to a company with which we are in a trade dispute, a serious trade dispute, at the WTO over illegal subsidies. I have serious concerns about economic impact in the infrastructure. I hope that we can meet again in the near future to talk about this competition not only to focus on some of the questions I have raised here, but on the contracting process as well.

And I will submit some questions for the record.

But I think these are serious issues that we as policymakers at this incredibly important moment, when we are going to decide something that will impact us for not just a few months or a few years, but really for decades to come. We have to think about that as we move forward, and I urge this subcommittee to look into those concerns. Thank you, Mr. Chairman.

Senator INOUE. Thank you.

Senator Shelby.

Senator SHELBY. Mr. Chairman, I will be brief.

General Moseley, Mr. Secretary, do you believe that the Air Force did the right thing in making the award, and do you believe that they selected the best plane for your mission? General Moseley.

General MOSELEY. Sir, I believe with the rule set that we have and the competition and the offerings we had, we got us a good airplane, and I am willing to fly it.

Senator SHELBY. Mr. Secretary.

Mr. WYNNE. Sir, we went through a very rigorous examination. We had a lot of interchange with the clients. I recognize that Boeing has asserted their right to protest, but we did, at the time, believe we bought the right airplane for the right price.

Senator SHELBY. Thank you.

Senator INOUE. I have tried my best to stay out of this controversy, but in order to clarify certain things, we have been told that the Northrop-Grumman contract involves a foreign country or foreign countries providing certain supplies of parts. Does Boeing have any foreign involvement, or is it all American-made?

Mr. WYNNE. I believe that Boeing does have some international suppliers.

Senator INOUE. May I ask from what countries?

Mr. WYNNE. Sir, I would have to get you that for the record, but it would not surprise me to think they were similar.

General MOSELEY. Sir, please let us take that for the record. We will have to do some research on specifically what countries produce what subassembly and what parts. Sir, I do not know that right now.

Senator INOUE. But you are certain that both companies have foreign involvement.

General MOSELEY. Yes, sir. That is my understanding.

[The information follows:]

The details of the 767 tanker Boeing proposed are proprietary and source selection sensitive. Since a protest has been filed with the Government Accountability Office, we cannot include such information in this written response. However, we can provide it verbally in a closed briefing, if requested.

According to the February 26, 2008 Assessment of FAA's Risk-based System for Overseeing Aircraft Manufacturers' Suppliers by the Department of Transportation (Report Number AV-2008-026), parts of the commercial 767 airframe are built in Japan and Italy.

#### ADDITIONAL COMMITTEE QUESTIONS

Senator INOUE. Mr. Secretary, General, I will be submitting several questions for your consideration, and I hope you will respond to them. And I wish to thank you for your testimony this morning and your service to our Nation.

[The following questions were not asked at the hearing, but were submitted to the Department for response subsequent to the hearing:]

#### QUESTIONS SUBMITTED TO HON. MICHAEL W. WYNNE

#### QUESTIONS SUBMITTED BY SENATOR DANIEL K. INOUE

#### END STRENGTH

*Question.* Secretary Wynne, the Air Force has reevaluated its planned personnel drawdown. Instead of drawing down to 316,000 airmen by the end of fiscal year 2009, you would like to grow to 335,000 airmen by fiscal year 2015. This revised plan will cost \$385 million in fiscal year 2009 and is not included in the budget request. If these additional personnel are vital to carrying out the Air Force's mission, why are they not included in the President's request?

*Answer.* Due to fiscal constraints, the Air Force will reduce our active duty end-strength to 316,600 in fiscal year 2009. This level clearly falls short of our required force of 330,000 active duty end-strength for fiscal year 2009, which increases to 335,000 by fiscal year 2015 due to force structure growth in CSAR-X, Predator and Global Hawk, KC-X, Distributed Common Ground Systems, and Battlefield Airmen.

The Air Force's required force—"what's needed per the 2006 Quadrennial Defense Review"—is 86 modern combat wings with 330,000 Active Duty Airmen in fiscal year 2009 growing to 335,000 by fiscal year 2015. However, without additional resources, the Air Force has to balance risk within its portfolio.

With fiscal year 2007 Program Budget Decision 720, the Air Force planned to reduce 40,000 Active Duty, Guard, Reserve, and civilian full-time equivalents in order to submit a balanced budget and self-finance the critical recapitalization and modernization needed to preserve America's air, space, and cyber superiority. An end strength of 316,600 seeks to balance the risk of deferring recapitalization and modernization with the risk of maintaining an end strength below our required force.

#### C-5 RELIABILITY/RERP

*Question.* Secretary Wynne, the reported mission capable rate for the C-5 aircraft in fiscal year 2007 was about 52 percent. We understand that the primary factors

for the low rate are inadequate maintenance and lack of investment in spare parts. Rather than investing an additional \$6 billion to re-engine the aircraft, why not put additional funding into maintenance and spare parts?

Answer. As opposed to the marginal utility offered with increases in sustainment funding, C-5 RERP will provide a significant increase in C-5 fleet availability by replacing the propulsion system and over 70 unreliable systems and components, eliminating the need for additional peacetime manpower requirements in the reserve components, which is the primary cause of the aircraft's currently low MC rate. Moreover, the new engines will improve aircraft performance, allowing the modified aircraft to carry more weight longer distances while burning less fuel. RERP for the C-5B is a smart investment from the standpoint of both reliability and performance.

(Additional funding for aircraft spares only provides a marginal improvement in C-5 mission capable (MC) rates. Aircraft spares have historically been funded to 100 percent of the MC rate standard (75 percent for Active Duty and 50 percent for Reserve Components) so additional sustainment funds may add little or no benefit to MC rate improvement. There are different MC rate standards for the reserve components because they serve as our strategic reserve for airlift capacity. In time of war, their manpower and sustainment footing is the same as the active duty and they have the same wartime MC rate standard.)

#### UNFUNDED LIST

*Question.* Secretary Wynne, a recent Congressional Research Service report states that between fiscal year 1998 and fiscal year 2009, the budget of the Department of Defense has grown by forty-four percent. The Air Force budget has obviously been a part of the total growth over those years. Despite the exponential growth of the budget, the Air Force has submitted an Unfunded Requirements List totaling over \$18 billion. What is the message that the Air Force is trying to convey to this Subcommittee with a list of 150 items that are current requirements but not included in the budget request?

Answer. Global trends over the last decade have presented significant challenges to our organization, systems, concepts and doctrine. Would-be adversaries are developing asymmetric approaches to attack vital levers of U.S. power and ascendant powers are posturing to contest U.S. superiority with "Generation 4-plus" fighter aircraft, increasingly lethal air defense systems, proliferation of surface-to-surface missiles and a resurgence of counter space capabilities. Demands for Intelligence, Surveillance, and Reconnaissance (ISR) and space capabilities, that simply did not exist a decade ago, as well as a renewed emphasis on modernization and emerging cyberspace threats to meet existing and expected challenges have placed significant stress on our baseline budgets.

The Air Force fully supports the fiscal year 2009 President's budget request and is appreciative of the increased funding over the last decade. These funds have given us the resources to win today's fight, take care of our people, and slowly modernize for tomorrow's challenges. While the fiscal year 2009 budget provides a moderate increase over the fiscal year 2008 budget and enables us to meet today's global commitments, additional funding is necessary to ensure Air, Space and Cyberspace dominance for the 21st Century. The fiscal year 2009 Unfunded Requirements List (URL) identifies our most critical needs should additional funding be made available. The majority of the URL is tied to the weapon systems, personnel, and support necessary to equip our Required Force of 86 modernized combat wings.

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#### QUESTIONS SUBMITTED BY SENATOR PETE V. DOMENICI

##### KIRTLAND AFB BRAC

*Question.* Among other things, Kirtland Air Force Base is home to the Nuclear Weapons Center, 58th Special Operations Wing, and two Air Force research laboratories. Where is the Air Force at in transitioning AFRL's Space Weather work to Kirtland, as required by the 2005 BRAC?

Answer. The Air Force intends to transition AFRL's Space Weather work from Hanscom AFB, MA to Kirtland AFB, NM in time to meet the BRAC mandated deadline of September 15, 2011. The estimated \$42.7 million military construction project to support the transition has an estimated contract award date of May 30, 2008.

## JOINT NEW MEXICO EFFORTS

*Question.* New Mexico offers a number of assets of critical importance to the Department of Defense, and I'm pleased the Department is taking advantage of those assets by locating F-22 at Holloman, Special Operations Forces at Cannon, research and space work at Kirtland, and a variety of test and evaluation work at White Sands Missile Range (WSMR). Additionally, Fort Bliss often does work in New Mexico, either on its own land or on WSMR land.

What are you doing to coordinate joint training and testing initiatives among these groups? Will you work with the Secretary of the Army to ensure that the Army's and the Air Force's work in New Mexico and Texas are coordinated and cooperative whenever possible?

*Answer.* U.S. Joint Forces Command's Joint National Training Capability (JNTC) provides the overarching policy and guidance for coordinating joint training. Joint training activity involving the New Mexico facilities and Fort Bliss, TX will include Fort Bliss Patriot batteries and Special Operations forces participating in JNTC accredited and certified exercises.

The Air Force and Army continuously seek opportunities to improve joint operations and activity. The Air Force is working closely with the Army to expand the use of the White Sands Missile Range and Holloman AFB, NM airspace for F-22 training. Joint Air Force-Army activities are addressed at the highest levels including the recent 2008 Army-Air Force warfighter talks conducted by both Services' Chiefs of Staff. The Air Force and the Army are both capitalizing on local joint training and exercise opportunities for joint intelligence, surveillance, and reconnaissance assets, conventional Army forces, and Air Force close air support units.

The Distributed Mission Operations Center (DMOC) at Kirtland AFB, NM remains the hub for connecting the Air Force and other Service participants, in a live-virtual-constructive arena. The DMOC Army Air and Missile Defense units have been habitual training partners and serve as both Red and Blue air defense in these exercises.

There is an initiative to develop a coordinated range scheduling and utilization system to help improve range space utilization on Holloman AFB, NM and White Sands Missile Range. The Air Forces ranges, Edwards and Eglin Air Force Bases, along with White Sands Missile Range are participating in the Common Range Integrated Instrumentation System managed out of Eglin AFB, FL—a Central Test and Evaluation Investment Program (CTEIP) initiative. Another CTEIP initiative that may involve test and training in the future is the Unmanned Aerial Vehicle System Operations Validation Program being managed at Holloman AFB, NM. Another CTEIP space initiative is the Space Threat Assessment test bed at Kirtland AFB, NM managed by the Space Development and Test Wing.

## NEW MEXICO ANG

*Question.* The 150th Fighter Wing at Kirtland Air Force Base has a proud heritage as part of the Air National Guard. The 150th used to fly Block 40 F-16s, but gave them to the Active Duty forces to assist in meeting mission priorities. Now the 150th flies Block 30 F-16s, which will soon be retired.

What is the Air Force doing to develop a new mission for the Air National Guard at Kirtland Air Force Base? Has the Air Force considered giving Block 40 or 50 F-16s to the 150th to enable them to continue providing their outstanding service to New Mexico and the United States?

*Answer.* As the Air Force, Air National Guard and Air Force Reserve Command continue to plan for programmed retirements of the legacy fighter fleet of A-10, F-15, and F-16 aircraft, we are analyzing ways to expand our Total Force capability in the fiscal year 2010 budget by considering building more classic and active associate units at Regular Air Force and Reserve Component locations, respectively. As we work through this Total Force Integration analysis, we will review all Air National Guard (ANG) and Air Force Reserve Command unit locations, to include the 150th Fighter Wing at Kirtland AFB, NM to support a potential future active association or to participate in a classic association. In the Chief's Roadmap released on January 16, 2008, Kirtland AFB, NM is a potential beddown location for the F-35 and CSAR-X. All future beddown locations will be impacted by Total Force Integration efforts and Environmental Analysis/Impact Study results. Currently there are no Block 40 aircraft available to transition the New Mexico ANG. However, the Air Force in coordination with the National Guard Bureau, is constantly reviewing aircraft allocations and adjusting aircraft beddown locations as the missions of the Air Reserve Component and the Regular Air Force evolve. The 150th Fighter Wing assigned aircraft will continue to be an important part of a comprehensive force structure optimized for national defense.

## QUESTIONS SUBMITTED BY SENATOR CHRISTOPHER S. BOND

## COST OVERRUN

*Question.* What is the amount of the current cost overrun for the F-22 program? What is the amount of the current cost overrun for the F-35 program and are reports that the program will result in a Nunn-McCurdy cost breach accurate? What is the amount of the current cost overrun for the C-5 modernization program? How many Nunn-McCurdy cost breaches has the Air Force experienced in the past 10 years? With a concern that these questions may be related, I am interested in knowing if the Air Force has an industrial base strategy and policy—and if so to explain to members of the committee the policy's goals and successes if any?

*Answer.* There is currently no cost overrun on F-22 since the last Selected Acquisition Report (SAR) baseline. This baseline adjustment in 2007 was only in military construction due to cost growth for bed-down of new F-22 squadrons. The F-35 is experiencing normal cost and schedule pressures but is not at risk for a Nunn-McCurdy breach in fiscal year 2009. The December 2006 SAR reflects approximately 38 percent unit cost growth since Milestone B. Contrary to the GAO report, the preliminary data for the December 2007 SAR shows no growth in Nunn-McCurdy measures from SAR 06 to SAR 07. The F-35 prime contractor is currently updating their estimated cost at completion. Preliminary estimates reflect increased costs between \$1.2 and \$1.5 billion over the remaining development contract. The Department has kicked off a joint independent government cost assessment which is supported by a team of Air Force, Navy, and OSD cost experts to support the 2010 President's budget request, which will be reflected in the December 2008 SAR. With respect to the cost overrun for the C-5 Reliability Enhancement and Re-engining Program (RERP), it is \$4.4 billion. The overrun is based upon a comparison of the approved February 2005 Acquisition Program Baseline and the January 2008 independent cost estimate accomplished by OSD in support of the RERP Nunn-McCurdy certification process.

The Air Force has experienced a total of 25 Nunn-McCurdy unit cost breaches in the past 10 years (1998-Present). A significant portion is attributable to the additional criteria established in the fiscal year 2006 National Defense Authorization Act (NDAA). The following breakout is provided for clarification: There were 15 breaches prior to the fiscal year 2006 NDAA, four breaches due to the fiscal year 2006 NDAA Section 802 directing initial implementation of the Original Baseline Estimate, and six breaches since implementation of fiscal year 2006 NDAA (breaches against both Original and Current Baseline Estimate).

Air Force leadership recognizes a healthy industrial base as an essential element of successful acquisition. As such, the Service has developed a comprehensive policy contained in Air Force Policy Directive 63-6, Industrial Base Planning. The goals of this policy are consistent with the Department of Defense's desired attributes for an industrial base; namely, one that is reliable, cost-effective, and sufficient. The Air Force is laying the groundwork for an industrial base strategy to support this policy and recently stood-up an Air Force Industrial Base Council as a forum to identify and address emerging industrial base issues.

Examples of Air Force industrial base successes include efforts to provide a domestic source for specialized batteries and to improve industrial capability to produce large-scale composite structures. Under the authority provided by Title III of the Defense Production Act, the Air Force began a three-year, \$8.7 million effort with Enser Corporation for thermal battery production in 2005. In 2006, a combined Air Force, Office of the Secretary of Defense, National Reconnaissance Office, Missile Defense Agency, and National Aeronautics and Space Administration four-year, \$84 million program was initiated under Title III to ensure domestic supply and production of space-qualified Lithium Ion batteries. Finally, in 2007, the Air Force initiated a three-year, \$15 million effort to increase the production rate of large-scale composite structures by making improvements in manufacturing equipment and processes. A new Integrated Automated Advanced Fiber Placement Machine replaces the current time-consuming operation with the capability to automatically and precisely control placement of the fiber required to produce complex, large-scale composite structures, such as aircraft wingtips, control surfaces, inlet ducts, and engine nacelles, resulting in increased production rates and cost efficiencies.

## F-22 PLAN B

*Question.* Your boss Secretary Gates, DOD civilian leadership, and elected civilian leaders in the Congress, have all stated that 183 is the number of F-22s. The Navy's acquisition has recognized that an expected shortfall in modernization dollars may require an adjustment in the mix of aircraft necessary to equip the future

force. I know the 383 is based on your "Required Force" model and we know what your Plan A is. However, Plan A is unrealistic and unsustainable in the current fiscal environment and to meet the current threat. You have been told this by civilian leadership repeatedly and yet, you don't appear to have a Plan B? What Plan B are you seeking to ensure AF fills the delta of 200 tactical fighter aircraft in the likely event that only 183 F-22's are procured and we see less than the projected number of F-35 aircraft because of continued cost growth and delays in fielding?

Answer. The Air Force is committed to the strategic imperative of providing Global Vigilance, Global Reach, and Global Power through cross-domain dominance to underwrite the security and sovereignty of the nation. The Air Force plans to implement this imperative by developing the QDR-directed 86 combat wing capability. Key to providing the air dominance element is a healthy recapitalization and modernization plan for replacing aging, less capable legacy platforms, but affordability of necessary capability is a major challenge to successfully achieve the Air Force's recapitalization objectives. The Air Force is encouraged by President Bush's and Secretary Gates' position to defer a decision on the F-22A line shut-down and ultimate numbers to the next administration. From a strategic perspective, the Air Force plans to increase the operational capability of some legacy air superiority platforms (e.g., F-15 Golden Eagles) while examining other future force structure alternatives to provide additional air dominance capacity.

#### FOUR-CORNER BASING PLAN F-22

*Question.* How many aircraft must the Air Force procure in order to establish a four-corner basing plan for F-22 aircraft and establish a roadmap that provides for the substantive involvement of the Air National Guard in the air supremacy and homeland defense missions?

Answer. 460 F-22s are needed to fully bed down F-22s at active duty and at the "Four Corner" Air National Guard locations. This provides all Air National Guard combat-coded bases with 24 primary aircraft authorizations. In this proposed plan, F-22s deliver to Four Corner Air National Guard bases in calendar year 2014.

#### RETIREMENT OF C-5

*Question.* What is the current Air Force position on the retirement of C-5 aircraft? If USAF is provided the authority to retire older C-5 aircraft will the Air Force POM for more than the (15) C-17 aircraft in the current UFR list? Does the Air Force UFR take into account the Army's requirement to transport the future family of Army ground vehicles in C-17 transports and the projected growth in Army and USMC ground forces?

Answer. We are conducting internal analyses to determine the future of the C-5As, including the number and mix of aircraft necessary to meet future requirements. Within current budgetary constraints we are unable to program for additional C-17s. A fiscal year 2008 procurement provided by a Global War on Terror Supplemental, as well as the 15 C-17s on the fiscal year 2009 Unfunded Requirements List, offer the ability to keep the C-17 production line open while we continue to evaluate emerging airlift requirements. Those requirements include the 92,000 person increase in ground forces, future combat system (FCS) and Mine Resistant Anti-Personnel (MRAP) transport and U.S. Africa Command stand-up.

#### KC-X AND MILITARY CONSTRUCTION

*Question.* I recently received reports that the Air National Guard, which manages 41 percent of the air tanker assets at 20 facilities across the nation (three of which will be closed due to BRAC) was not consulted on the KC-X tanker solicitation. Additionally, concerns have been conveyed to my office that there are significant MILCON costs associated with the Airbus-KC45 because of the size differential between the Airbus-KC45, Boeing-767 and the KC135 tanker variants. Reports indicate that the MILCON costs associated with the Airbus-KC45 will be significantly higher than the costs associated with the Boeing-767, a factor that in the longer term may prohibit the future participation of the Air National Guard in the tanker mission.

(1) Can the Air Force explain why it would not consult with its strategic partner in the Air Force tanker mission on what is clearly the most important tanker decision the service will make in the next 50 years? (2) What are the projected MILCON costs associated with the Airbus-KC45 basing plan to include new hangar facilities, support equipment, ramp and runway upgrades if required and how will weight and size restrictions of the Airbus-KC45 impact operational effectiveness in comparison to the Boeing-767? (3) How did projected MILCON costs for the Airbus-KC45 and Boeing-767 factor into the final decision?

Answer. (1) The Air Force did consult with the Air National Guard regarding the KC-X program. A member of the National Guard Bureau participated in the development of the requirements and supported the KC-X source selection as a subject matter expert.

(2) MILCON costs include new buildings, modifications to existing buildings, new hangars, ramp expansions, and relocation of fuel hydrants. Specific costs for the KC-45 are source selection sensitive, and since a protest has been filed with the GAO, they cannot be included in this written response.

Aircraft characteristics such as size and weight were accounted for in the Integrated Fleet Aerial Refueling Assessment, one of the five evaluation factors. The comparison of this assessment for the two aircraft is source selection sensitive; we can provide this information verbally in a closed briefing, if requested.

(3) One of the five source selection evaluation factors was Most Probable Life Cycle Cost (MPLCC). MILCON is one component of the MPLCC. It was not weighted or considered separately.

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QUESTIONS SUBMITTED TO GENERAL T. MICHAEL MOSELEY

QUESTION SUBMITTED BY SENATOR DANIEL K. INOUE

CYBER DOMAIN

*Question.* General Moseley, the Air Force appears to be staking out new territory with the recognition of cyber warfare as a separate domain and the stand-up of the new Air Force Cyber Command in October of last year. Your recent White Paper on the 21st Century Air Force asserted that cyberspace superiority is essential for success and is the enabler for air, land and sea warfare. Could you elaborate on what you mean by cyberspace superiority and what steps are needed to attain it?

Answer. We define Cyberspace Superiority as the degree of dominance in cyberspace of one force over another that permits the conduct of operations by the former and its related land, air, sea, space, and special operations forces at a given time and place without prohibitive interference by the opposing force. [taken from Draft AFDD 2-X: Cyberspace Operations (version pending)]

To achieve cyberspace superiority, the Air Force must take these steps:

- Develop an organized, trained, and equipped force capable of integrating, synchronizing, and executing cyber operations across the full spectrum of conflict.
- Field diverse capabilities to hold our adversaries at risk in and through cyberspace across the globe.
- Foster strong ties with other Services, government agencies, industry, and academic institutions to share intelligence, strategy, technology, and intellectual capital.
- Develop a globally networked command and control capability able to coordinate extensive and simultaneous regional and trans-regional effects, and able to operate in and through a contested cyberspace environment while maintaining data integrity and able to recognize loss of integrity.
- Develop and sustain the supporting technical, intelligence, and command infrastructures needed to plan, conduct, and assess cyber operations.

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QUESTION SUBMITTED BY SENATOR CHRISTOPHER S. BOND

FOREIGN MILITARY SALES F-22

*Question.* General Moseley, are you aware of congressional concerns and the law prohibiting foreign military sales of the F-22? If so, can you explain your position in support of opening up discussions on FMS for the F-22? This again, is counter to civilian leadership and current law.

Answer. I am aware of Congressional concerns about foreign military sales of the F-22, and understand the Obey Amendment. I would welcome the opportunity to discuss export of the F-22 should Congress and the Secretary of Defense wish to do so in the future. Just as we require airpower capabilities to defeat adversaries, our allies have similar requirements for appropriate airpower capabilities.

SUBCOMMITTEE RECESS

Senator INOUE. This subcommittee will reconvene on Wednesday, April 2, at 10:30 a.m., and at that time we will be in closed

session to receive testimony on the space programs. Until then, we will be in recess.

[Whereupon, at 12:09 p.m., Wednesday, March 12, the subcommittee was recessed, to reconvene subject to the call of the Chair.]